PERSPECTIVE

Transitioning from student to doctor: a student's perspective on the value of resuscitation simulations

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Final-year medical student often report feeling unprepared to respond to medical emergencies. Simulation provides students with a safe and realistic environment to practise their skills. This helps improve student confidence and teaches important teamwork skills. Herein, I present my experiences during a simulation on advanced life support.

Like many of my peers, my clinical exposure had been severely hampered by the COVID-19 pandemic. In fact, it was not until my final year of medicine that I finally witnessed a code blue in action:

It was just another day on the cardiac ward when the announcement came. At first, there was a transient calm as we all listened, and processed. Before I knew it, the ward erupted into what seemed to me was an organized chaos. The registrar, resident and nursing staff all snapped into action. There was an air of urgency, but never panic. In fact, the only one who panicked was me; I felt lost, confused and unsure of my role. Most of all, I dreaded that in less than a year's time, I will be an intern who may have to respond to a code blue in the dead of night.

My story is not unique. My peers have recounted similar anecdotes and several studies have confirmed that students often feel unprepared in responding to acute emergencies [1–3]. Not only do ill-prepared graduates endanger patient safety, but repeated negative experiences can serve to reinforce a student's feelings of inadequacy and limit growth [4].

This begs the questions: (a) Why do medical students feel ill-prepared, and (b) what can be done about it?

I believe the fundamental reason is not a lack of knowledge but a lack of practical exposure. For medico-legal reasons, students are often asked to remain passive observers during real emergencies. Therefore, we do not have the opportunity to engage and receive feedback, perpetuating the feelings of helplessness and confusion. If students cannot be involved in real MET calls, then the logical solution would be to simulate emergencies in a safe, controlled environment.

As a final-year medical student, I attended a simulation as part of our advanced life support curriculum. In a group of four students, I was assigned to be Team Leader in the first scenario. As we waited to be called in, I was feeling confident, ready to use the mnemonics that had been drilled into me for OSCEs. But then the nurse burst out of the simulation room, rattled off a quickfire clinical handover, and before I could gather my thoughts, I was ushered into the room. Where was the 2 minutes of reading time?

I was greeted by a realistic ward, complete with IV stands, trolleys and a crash cart. Our patient was a mannequin, with lifelike animatronic blinking eyes and a human voice. Just like in the real MET calls, my mind went blank. I was

bombarded with numerous sources of information: from the nurse, the monitors and the patient. The countless number of branching paths and competing priorities felt overwhelming. Although no lives were at stake, I nevertheless felt pressure to perform especially because I knew we were being watched. The simulation felt real, forcing me to make complex and timely decisions within a stressful environment.

I turned to my peers, who looked just as paralyzed as myself. We stumbled through the basics – assessment of airway, breathing, circulation, etc. However, our performance was disorganized. There were no clearly defined roles and communication loops were left open in all the commotion. Finally, the simulation ended, and we headed to the debriefing room.

I found debriefing to be the most valuable component of the workshop. We were asked to recount our thought process and feelings during the simulation. This allowed me to systematically break down my actions and rationale in a calmer setting. In doing so, I formulated a more coherent understanding of the clinical situation. Group discussion with other students gave me insight into how my actions impacted others, and we reconciled our differences in communication style. With prompting from our experienced facilitator, our team took away two important lessons: one, to assign roles and establish communication expectations; and two, to use a systematic approach that would allow us to quickly address competing priorities. On our second attempt, although far from perfect, we were more successful – and with each subsequent attempt, our confidence grew.

Although I was confident in my knowledge, I felt a stark difference between applying it in exams and formulaic OSCEs, in contrast to navigating the complex clinical scenarios within stressful real-time simulations. By reproducing the stress in a real emergency scenario, simulation provides a valuable element of teaching missing from traditional curriculums [5]. When combined with debriefing sessions facilitated by an experienced educator, this helped contextualize my textbook knowledge and build clinical awareness in a team setting [6]. Above all, through repeated practice in realistic scenarios, I was able to overcome the initial freeze response that locked me in place. The strength of simulation in building students' confidence has been reported [7,8]. While the relationship between confidence and competence remains tentative [9], from my perspective as a student, I am thankful for the experience.

Thus, if I were to encounter another code blue scenario, there are three important principles which simulation training has taught me. First, I will call for help, recognizing that I cannot manage any emergency alone. Second, I will communicate clearly and regularly with colleagues around me, ensuring that everyone remains on the same page. And finally, I will debrief and reflect after every incident to continue to improve my awareness.

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