



SURGICAL POST-GRADUATE TRAINING IN COVID-19 ERA

General Surgery

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ABSTRACT

Almost it's the end of year 2020, and still the entire world is grappling with this pandemic. What appeared just another form of SARS epidemic, engulfed the whole world and brought most of our lives to a stand-still. The consequences of this ongoing Corona- pandemic on students' education throughout the world is now being widely seen as well as documented in the literature. However, the impact of COVID-19 on medical postgraduate training of residents and fellows has not been adequately discussed in the literature. Since its inception earlier this year, various countries issued guidance to temporarily suspend medical student clinical duties due to the COVID-19 pandemic. However, what is much less clear is the impact of COVID-19 on medical education. Already, faculty and medical students are coping with the changes that have been made and attempting to consolidate these with their plan of career development. Changes that may seem relatively minor in comparison to the global pandemic have the potential to be drastic turning points in the career progression of many.

The attributes that medical students should demonstrate during this time of challenge are persistence and adaptability. While every student has a personal story of how COVID-19 has impacted their education, the panic in the community is palpable, and many are confused by how to proceed in the wake of COVID-19. Implementing technology into medical education in a unique way will allow students to develop collaborative skills and improve adaptability. Navigating the challenges associated with remote collaboration with their peers sets up a unique parallel and practice to what interprofessional cooperation and telemedicine could look like in our future careers. As not much is known regarding the long-lasting impact of COVID-19 on medical education, it is therefore also necessary to record and study the full impact of the changes being made.

KEYWORDS

pandemic, medical education, impact, telemedicine, skills, technology

INTRODUCTION

The usual residency program here in India requires the well designed curriculum of two to three years having ample exposure to patients, research and thesis work, conferences, presentations, internships. The path has been predictable for the last few years, all of which were designed to best demonstrate a student's knowledge, persistence, collaborative spirit, and dedication to medicine. This trajectory has been changed with COVID-19 disrupting routines in hospitals, medical schools and beyond. The replacement of in-person classes with online equivalents is an obvious necessity at this time but creates a loss of collaborative experiences that has the potential to be a significant detriment to education. While dedicating entire institutes for COVID care was seen as a necessary as well as imminent step for the governments since the inception of this pandemic, it has inversely affected the teaching and learning of students as the wide diaspora of patients that used to be there have reduced significantly, which are necessary for both skill acquisition as well as for relationship building.

Current scenario:

A brief look at past can help in understanding the present situation better. We reflect on the effects of severe acute respiratory syndrome (SARS) on medical education in China at the turn of the century. Some Chinese medical schools officially cancelled formal teaching on wards and their exams were delayed, hindering the education of medical students in the face of the newly emerging epidemic. Similarly, in Canada, the impact of the SARS restrictions led to the cessation of clinical clerkships and electives for students for up to 6 weeks. The Canadian national residency match felt the effect of these limitations, particularly because electives are one of the most crucial factors determining allocation.

There is no need to prove that outpatient volume has drastically reduced during this pandemic. Non-urgent outpatient clinic appointments have been canceled. These visits are now being conducted over the phone or through video calls, which do not include a traditional physical exam. Physical examination being an essential skill, can only be mastered by practice. This markedly reduced patient volume (mostly non-covid) in the inpatient service has limited trainee education. Medical trainee education requires a high volume of patient encounters. The reduced patient volume has reduced opportunities for trainees to perform essential inpatient procedures. Some residency programs had to waive the minimum number of procedures required

for 3rd year residents to graduate because of the COVID-19 pandemic. These residents may graduate and become attendings without achieving proficiency in essential medical and surgical procedures. Most hospitals have canceled outpatient/elective surgeries since march-april, 2020. Trainees in procedural specialties are affected by this. This imparts on the trainee's ability to develop proficiency in these outpatient procedures. In addition to trainees working with a reduced patient volume, there has been a reduction in the diversity of disease pathologies exposed to trainees during this COVID-19 crisis.

For a variety of reasons, many schools have also cancelled clinical duties. One reason is to flatten the curve, with the goal of minimizing personal interactions to mitigate and contain the spread of COVID-19. Another reason is to decrease the risk of exposure for medical students, which is an understandable concern, although many students are willing to put themselves at risk and as such can be frustrated by these decisions.

All major in-person academic conferences have been canceled during this COVID-19 era. Academic conferences allow trainees to present their research findings in the form of oral or poster presentations. Most of these conferences have decided to switch from traditional in-person gatherings to a virtual platform to provide educational content safely. Many medical students have also lost the opportunity for personal development through conference presentations. Although minor in the context of the global pandemic, it raises the question on how to account for these changes and adapt as a trainee. As a student, one has to learn how to balance the status of being a learner planning out one's career, with the privilege of being a future health care provider who can valuably contribute to the health crisis at this time. As many medical students now will miss out on the valuable experiences of presentations, clinical rotations, and collaborative experiences - standards which helped previous generations become future doctors - the question arises of how students will evolve and integrate themselves into the medical community. When considering the reasons why conference presentations and extracurricular activities become so central to residency applications, it is important to recall what they actually represent for each student.

Due to the COVID-19 pandemic and need to limit exposure of healthcare workers, some trainees have been placed on standby. This means that trainees are at home and only come to the hospital if the

need arises. More trainees in specialized nonprimary care specialties are on standby due to markedly reduced patient volume in these specialties. Although having a group of trainees on stand-by will reduce healthcare worker exposure to COVID, this will reduce the learning opportunities for trainees to become competent in their respective fields.

In order to learn from this pandemic, it will be important for medical schools to share best practices as to how they are addressing the cancellation of duties in order to ensure that students progress forward within medical school and ultimately satisfy graduation requirements on-time.

CONCLUSION :

While patient care and clinical responsibilities are important, the educational experience of the trainees should not be de-emphasized. Training via virtual platforms should continue. Trainees on standby should be encouraged to do research and scholarly activities. Faculty should continue to work on curriculum development using telemedicine and other creative avenues to ensure the delivery of the latest educational materials to trainees. Since students feel that they are missing out on the opportunities that these in-person conferences and presentations provide, there is a growing demand for organizing online conferences. This has been met with recommendations for the designing and organizing such events. The younger generations in medical school are perhaps best equipped to integrate technology and webinars into health care delivery and sharing medical knowledge in innovative, online settings.

Students who are better able to adapt to this unique situation of COVID-19 will show their ability to think outside of the box and alter pre-conceived notions of how surgery should be practiced. Therefore, this demonstrates a student's adaptability and innovation. Students must be innovative in devising ways to exhibit their skills, work ethic, teamwork, and dedication to research. Persistence and adaptability during this time will be an attribute more readily viewed in the face of these new challenges and the innovative approaches to addressing these difficulties.

Conflicts of interest : None

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