

Tackling the Changing Landscape in Medical Schools Post COVID-19 Pandemic

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INTRODUCTION

Medicine has always been about evolving scientific knowledge, constantly changing across disciplines as well as over time. When clinicians were alerted on the emergence of the COVID-19 pandemic in late December 2019, everyone knew that the world was heading towards an avalanche of change, but no one could foresee how vast and deep the impacts were going to be.

The recent months has shown us that public response to community control during a pandemic varies. The methods used to contain the pandemic deeply affected the day-to-day lives of the citizens. Although some understood the changes imposed on them, others opposed the regulations as unfair. Some obeyed, while others broke the rules that were meant to protect them. Whatever the reaction to the pandemic, millions of people around the world are now working from home and for most, it is for the first time.

This sudden global shift from working in a close social network to one in isolation through either strict movement control or complete lockdown of cities all over the world, forced us to adapt to this new situation. Within the first few months of this restriction, we were battling with the loss of normalcy and were driven to find alternative ways and means of working under these conditions. And as the saying goes, necessity is the mother of invention, we became more innovative in establishing a new working environment, befriending the digital world as we reconnected through online platforms and various online social media channels.

And now that we are fortunately heading towards the end of the pandemic, we write to describe what we anticipate will be in store for us. A sneak peak of not just as challenges and misfortunes but probably the many opportunities and possibilities that await us.

Teaching and Learning

The COVID-19 pandemic has forced medical schools to shift rapidly from face to face to online learning [1]. Although online teaching is not a novelty, it was quickly apparent that not all members of the faculties are proficient in managing virtual classrooms. Online teaching efforts are eventually all about student success. Hence, it must be ensured that no one is left out. In developing countries such as Malaysia, a major factor to be taken into consideration is internet connectivity as some of the students living in rural areas might be grappling with network connectivity. To include learners who have weaker online connectivity, consideration has to be taken to reworking online courses that take up less bandwidth or provide them with courseware packages or lecture playbacks. Thus, technology must be implemented into medical schools in a unique way allowing students to demonstrate and develop knowledge and clinical skills. In order to demonstrate skill, teamwork and work ethics, both lecturers and students need to be innovative in coming up with different methods. One of the easier methods to do is probably interactive learning groups, such as small group case-based learning using webinars and teleconferences [2].



Whether unfortunately or uniquely, medical school curriculum is not designed to be completely online as participating in direct clinical care is the most fundamental element. Patient history-taking and physical examination skills cannot be performed through online methods. The impact of the pandemic in medical schools is substantial, especially when it comes to clinical rotations. Temporarily, all clinical teachings were ceased in order to reduce the risk of exposure to the students, mitigate COVID-19 and flatten the curve [3]. However, this is not an ideal long-term solution. Detailed planning in bringing the students back to the faculty would, and perhaps should, include a *test, trace, track, and quarantine strategy* [4], which aims at preventing infections among the students. However, this would involve collaborations, cooperations and coordinations from all relevant authorities at various levels, a mammoth task for a greater cause.

Research

When universities were instructed to shut down, postgraduate students were told to evacuate their institutions to be ‘quarantined’ at home. Postgraduate students are the lifeline of most lab-based research within a university, and with them gone, research came to an almost complete standstill in most institutes. Just prior to the initiation of the movement control, postgraduate students were hastily finding ways to temporarily suspend their research projects without compromising the quality upon recommencement once the movement control order was lifted. Specimens were frozen or quickly processed, animals sacrificed, or released and reagents and consumables stored in the best optimal environment possible to preserve their integrity. Clinical research was regarded as non-priority with the hope that things would have returned to near normal by then. At the time of writing, the government has allowed the Masters and PhD students to return to universities to resume laboratory research, workshops and practical work, under the new social norm [5]. This, therefore, requires us to once again, be innovative in our approach to working under these new conditions. Precautionary measures such as personal hygiene, social distancing and vigilance, although not outlined, have to be defined and adhered to in the form

of clear standard operating procedures to limit the number of students in the laboratory at any one time, to ensure proper sanitation facilities are in place and to establish a channel for self-declaration if symptomatic. Students should be encouraged to communicate with their supervisors via electronic means and avoiding physical appointments as best as possible. By optimizing communication through a digital platform, will, unintentionally, save both parties the time for travelling, especially when both are not within the same vicinity. Furthermore, group discussions between students and supervisors can be done effectively without the need to arrange for a formal face-to-face meeting. This form of communication may inadvertently continue as a new normal for the near future.

Clinical Work

The pandemic has profoundly affected clinical work for most clinical lecturers. This was evident when elective surgical cases were postponed, semi-elective cases had to be judiciously screened for the virus, clinics were told to reduce the number of patients to avoid overcrowding and a strict screening process was put in place. Three-monthly clinic visits were lengthened to half a year. Although some effort was made to identify stable patients who could afford longer periods of consultation, this could not be a long-term solution. Thus, virtual clinics are a viable option, where patients could come for blood tests but the consultation with the doctor was conducted online. Through a video call, whereby patients are able to show the doctor any possible signs and have a consultation similar to an actual visit. Patients who are experiencing signs and symptoms that could not be assessed through this method could be advised to go to the nearest hospital. This method not only allows the doctors to assess the patients but also encourages patients to adhere to their management plans, as they are aware that they are still being monitored. However, the reduced number of patients will affect postgraduate and subspecialty trainings. Trainees are restricted in terms of patient numbers and also patient contact.

There have always been inherent risks with a physician’s job, so it is imperative for medical students

or subspecialty trainees to learn early, and more importantly in a supervised setting. Preventing them from learning during this pandemic might be detrimental during the next global health crisis, as medical schools are the training centres for future frontliners and essential personnel. Aside from training, this cohort of medical students and trainees can learn from the current mistakes and deficiencies making them fully equipped to handle future crises. It is essential to teach medical students and trainees to protect themselves whilst administering the best patient care.

In conclusion, innovation and adaptability will demonstrate the ability of lecturers and students to think outside of the box and change the preconceived ideas of how medicine is taught, learned and eventually practiced. During this unprecedented COVID-19 pandemic, adaptability, flexibility and persistence will be the key attributes in addressing the difficulties in the changing landscape in medical schools.

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