

Medical Education During COVID-19: A Student Perspective

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Abstract.

This short article discusses the impact of the COVID-19 public health guidelines on final medical examinations from the perspective of a student and argues for greater engagement with online learning in medical education.

Keywords: COVID-19; Health Science; Medical Education; Medicine; Student.

1. Introduction.

It is the summer of 2020 and I have just graduated from medical school at the peak of a global pandemic. Over the last few months, we have been repeatedly told that we are entering the Irish Health Service in some of the most challenging and unprecedented times the world has faced. I feel proud to be joining the front lines however, I cannot say the lead up to this felt the same. As COVID-19 spread across Asia, it was inevitable that it would eventually reach Europe and Ireland. I did not fully realise what the personal consequences of this would be until we were told our final year medical school examinations were being brought forward by 6 weeks. I have decided to share my perspective because I believe the experiences from this pandemic provide a landmark opportunity for educators to remodel the current delivery of medical education.

2. Medical Examinations during COVID: A Personal Perspective.

Medical school examinations are unique. There is perhaps no other event that requires an individual to commit huge volumes of detailed information to active memory, while concurrently

ensuring that the knowledge committed is precisely organised for quick and effective recall. Meticulous planning is required for such an ordeal and no, a six weeks buffer isn't generally built in. When the news was first announced in a year-wide address, I could see my fellow students' faces fill with despair. This was not part of anyone's plan – not the medical schools' and certainly not ours.

Every student has a different approach to learning and retaining the incredible volume of knowledge required for final year. Some people employ a “*deep*” learning approach where they rely more on patient interactions to create neural links and solidify their learning. Others might use a “*strategic*” method where repetition of material, good organisation and effective time management are leveraged to maximise exam scores (Chonkar et al, 2018). The change in timeline, order of events, and examination formats had different implications for each person. With exams being brought forward, the two biggest challenges for my cohort were the loss of: additional time on the wards; and weeks of group-based consultant and registrar teaching. These tutorials are invaluable to students. Some of the best teaching and preparation advice is delivered during these sessions. From physical skills to patient management, learning in a clinical context is necessary as it is the “*only setting*” in which students can practice a range of clinical competencies (Spencer, 2003). Missing these final weeks was daunting for everyone. At that moment in time, it was difficult to focus on anything apart from these losses.

After the initial shock wore off, our focus quickly turned to how our medical school was actually going to manage this. How could exams be reorganised in a way that didn't compromise the legitimacy of our degrees while also providing us with an opportunity to reflect our aptitude. Medicine and Surgery clinical examinations were conducted together and were administered using a single case format. Written exams were conducted online and invigilated via Zoom. The university deserves recognition here, as what could have been a farcical and stressful series of events actually proceeded without incident. In hindsight, preponing the exams was the best decision made. I am grateful for the rapid response and hard work of Trinity College Dublin that enabled us to complete our final year examinations in a timely manner.

If nothing else, this pandemic has highlighted an important aspect of medical education: there is an increasing need for medical schools to engage in online learning and simulations. While medical schools were able to adapt to help students finish their final year, the knock-on impact of COVID-19 remains for other years. Although medical schools are moving towards online learning, the pandemic has accentuated the urgency with which it needs to be implemented.

In 1998, McManus et al concluded that medical students who employ deep and strategic learning styles perform better in final examinations. Thus, medical educators should implement strategies that enable students to employ such learning styles. Dacre and Fox (2000) explore a set of guidelines that encourage deep learning. This includes emphasizing “*higher intellectual skills*” like problem solving, moving away from didactic “*fact loaded teaching*”, and providing interactive opportunities that “*encourage student questioning*” (Dacre & Fox, 2000). One possible framework for medical teaching could be centred around pre-recorded lectures. The benefits of this simple initiative are multifold: students would be able to consume lectures at their own pace and direct their own learning; lecturers are free to focus on conducting in-person sessions with real cases and practical learning; and students have the opportunity to ask questions and receive feedback in an intimate setting. I believe this framework can help students in more ways than we realise.

Many traditions were broken with COVID-19 including the first ever set of remote graduations. For what is sometimes seen as one of the world’s oldest professions, the events of this year have reminded us about the potential for medical institutions to evolve and embrace change. I look forward to seeing the innovative ways in which students and educators progress in a post pandemic world.

3. References.

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