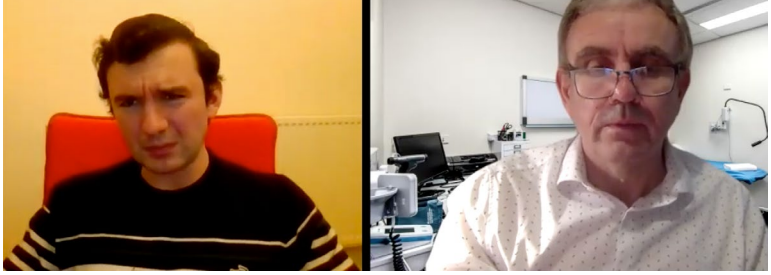

How medical education can help in a COVID-19 crisis

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I am recovering from a state of shock at what is happening with the COVID-19 crisis and how clinical education is undergoing rapid change. Here, I reflect on how medical educators can help in this crisis. As a clinical academic (teaching and research), I have responsibility for faculty development and interprofessional learning at a medical school in a research-intensive university in Australia. I am one of the leadership group delivering the first year of a new graduate-entry Doctor of Medicine (MD) curriculum, whilst also continuing with the previous MD programme. The university has recently completed a major organisational restructure, bringing together medicine, dentistry, nursing, pharmacy and allied health to form one comprehensive faculty. In the medical school, we are currently grappling with: (i) preparing volunteer final-year medical students to contribute usefully to clinical service during the pandemic as 'assistants in medicine' (pre-internships),[1] as well as providing educational supervision and assessment while dovetailing with the requirements of the state-wide health education and training agency responsible for managing internships; (ii) delivering my own and supporting colleagues' bedside clinical teaching via Zoom, as clinical placements have largely been suspended for the safety of students, patients and hospital staff; (iii) delivering large-scale online interprofessional activities that we have delivered face to face for 5 years; and (iv) providing additional feedback and support to promote well-being via online learning advisors, for students who are studying remotely. Clinicians are being asked whether they are prepared to work outside their usual scope of practice if they are called to be on the COVID-19 frontline. Academic clinician-educators have never worked harder.

There are lessons for medical educators from previous epidemics,[2] but there is no blueprint for a pandemic. Prompted by the challenge of COVID-19, leading medical educators have

questioned the value of the international medical education research community.[3] I had wondered whether we already had enough research evidence and the real problem was that it was not being translated into practice and enacted into policy.[4] Our collective history of responding to change suggests that the fundamental issue of improving the methods of teaching medicine to produce doctors who are well prepared to provide high-quality care has changed only incrementally in the century since the Flexner reforms.[5] Contemporary competency-based medical education frameworks have improved fitness to practise worldwide; however, there was a lost opportunity on the Flexner report's centennial anniversary to find collective ways to tackle the fundamental restructuring of medical education required for the 21st century.[6] The COVID-19 crisis has led to wholesale restructuring towards online teaching based on necessity rather than a settled evidence base of what works and for whom. In this time of disruption, our accreditation bodies must rapidly adapt to approaches that work best and must become more agile in order to shorten the decade-long cycle of introducing sustainable curriculum reforms. In assessment, the preponderance of rote learning in the ever-expanding discipline-based basic sciences needs to be addressed and decoupled from the dominance of the multiple-choice question in written assessment. We need to develop online forms of active learning methods, such as team-based learning, to ensure the integration of basic science into clinical competence.[7] In clinical assessment, do we really want to see the objective structured clinical examination, a beast of its time, but increasingly flawed in its objectivity, injected into online testing or delivered under the duress of infection control?[8] We need to agree to assessments based on the longitudinal collection and triangulation of information about a student or trainee's performance and progress, now and when the pandemic is over. Such assessments have been shown to lead to higher levels of competence when compared with single-event examinations and are a better fit for work-integrated learning.[9]

None of us individually has a magic solution as to what medical educators should do in this crisis. The right groups of people can develop the evidence base by rapidly putting together reviews that address the major problems facing us in in our disrupted training programmes. It is particularly challenging for educators to think at a systemic level and include broad societal considerations, especially when taking an interdisciplinary approach to addressing concerns about the outcomes of medical schools.[10] An interdisciplinary approach can build on disciplinary perspectives to offer creative solutions for those who grapple with the preparedness for practice of medical students. Experts in the use of technology need to deliver learning environments built on what is pedagogically sound, not what is in vogue. Health professional educators need to re-engage with the fundamental issues of learning and teaching that can be adapted to a time of disruption. These include how we learn, learner engagement and agency, ethical practice and a wider lens through which to view assessment.

Medical educators can address the modest uptake of research evidence in clinical education. Knowledge translation strategies suggest that educators can increase that uptake by becoming knowledge brokers and sharing decision making with accreditation bodies, university leaders, vocational training organisations and professional colleagues.[4] This is a tall order, yet the need has never been greater to reframe health professional education and to translate the research base into practice. The focus is not on transferring innovation, but on adapting longstanding good practice to new contexts and disseminating scholarship in a way that balances efficiency and critical review.[3] This is a global conversation that will continue for the foreseeable future and I am keen to contribute.

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