Adapting to the impact of COVID-19: Sharing stories, sharing practice

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Abstract

Health Professions' Educators (HPEs) and their learners are having to adapt their educational provision to rapidly changing and uncertain circumstances linked to the Covid-19 pandemic. This paper reports on an AMEE-hosted webinar: *Adapting to the impact of COVID-19: Sharing stories, sharing practice*. Attended by over 500 colleagues from five continents, this webinar focused on the impact of the virus across the continuum of education and training. Short formal presentations on teaching and learning, assessment, selection and postgraduate training generated wide-ranging questions via the Chatbox. A thematic analysis of the Chatbox thread indicated the most pressing concerns and challenges educators were experiencing in having to adapt programmes and learning across the continuum of medical education and training. The main areas of concern were: campus-based teaching and learning; clinical teaching; selection and

assessment, and educator needs. While there is clearly no one simple solution to the unprecedented issues medical education and training face currently, there were two over-arching messages. First, that this is a time for colleagues across the globe to help and support each other.. Second, many local responses and innovations could have the potential to change the shape of medical education and training in the future.

196/200 words

Covid-19 was declared a pandemic by the World Health Organisation (WHO) on 11th March 2020 and is now rapidly sweeping around the globe. As a consequence, Health Professions' Educators (HPEs) and their learners (at all stages of education and training) are having to adapt their educational provision to rapidly changing circumstances in a state of ongoing uncertainty.

On 27th March 2020, the WHO daily situation report stated that there were 509 164 confirmed cases and 23 335 deaths across the world. On that same date AMEE hosted a webinar: *Adapting to the impact of COVID-19: Sharing stories, sharing practice* presented by the authors of this paper. The aim of this 90-minute webinar was to provide a platform for HPEs to come together in a supportive, safe space to begin to share their stories, challenges and ways of adapting their practices to the impact of the virus. This first webinar focused on the impact of the virus at various stages of education and training, with further webinars planned to focus on faculty and student wellbeing. The webinar included short presentations on learning, teaching and curricula; selection; assessment; and the continuum of education. Questions were posed and answered throughout the webinar via a facilitator-moderated chatbox, allowing participants to comment in real time during the webinar and share concerns, questions and ideas. There were 906 pre-registrants. Of these, 518 colleagues, representing every continent and global region, logged in on the day. HPE colleagues from the Caribbean, the Middle East, Africa, the Indian sub-continent, Asia, Australasia, the Americas and Europe interacted with one other and the presenters via the chat functionality. Subsequently, the webinar was made freely available on the two AMEE websites and on its dedicated Facebook page (https://amee.org/webinars ; https://www.mededworld.org/SIGs ; https://amee.org/covid-19).

In this commentary, we reflect on the questions and discussions generated during the webinar, particularly as part of the facilitated chat function. These summarise the most pressing concerns

and challenges educators were experiencing in having to adapt programmes and learning across the education continuum. A rapid content analysis of the recorded chat identified that these challenges fall into four broad themes, each of which is discussed briefly below. A core message from the analysis was a need for resource sharing and faculty development activity, and the authors reflect on this and provide some initial suggestions to explore the issues raised by participants.

Theme 1: Campus-based teaching and learning

Discussion covered campus-based and clinical learning. Many medical schools are faced with near or complete closedown in terms of campus-based teaching and have had to make tough decisions; postgraduate training programmes continue but are subject to disruption with a prioritization of clinical service. Following Tolsgaard et al (in submission), these decisions can be categorized as:

- What has to continue no matter what?
- What can be postponed?
- What can be adapted, changed, or run in a different way?
- What do we have no choice but to cancel?

For instance, can online and remote learning be used and, if so, for what aspects of teaching and learning? What aspects of clinical skills training can be conducted with physical distancing? What is feasible or not given resources and restrictions?

Colleagues wished to know what adjustments and tools have helped in other contexts. Discussion indicated that technology is key to virtual education delivery. Participants wanted

guidance on what solutions and platforms could be used to deliver online teaching and assessment, and shared their experiences of using Whatsapp, Zoom, Blackboard, Facebook, Padlet, etc. Colleagues from less resourced regions highlighted the need for reliable ways of being able to transmit information and communicate, particularly when bandwidth is limited or access to suitable devices is poor (for learners and educators alike), and online resources which they and their students could access for free.

The pressing need for practical solutions and learning from others highlighted a clear space for AMEE, national organisations and those involved in overseeing medical school and postgraduate medical education to use their existing platforms to share experiences, recommendations and, where possible, materials (the latter pro bono ideally). This is a time for colleagues across the globe to help and support each other.

Theme 2: Clinical teaching, learning and assessment

One of the main concerns expressed by participants was about students missing out on workplace-based experiences. Simulated ward-rounds, consultations and team working may go some way to help learners achieve their objectives, but it is challenging to identify alternative models of teaching and learning which would allow students to access the complex situationism of workplace learning experiences (Dornan et al 2007).

Participants reflected on the fact that balancing tensions between service and training are difficult at the best of times (Cleland and Durning 2019) – more so in the current climate when patient, staff and learner safety must also be prioritised. In fact, resident education has been suspended in many countries, so residents can focus on delivering service and supporting senior colleagues. These activities will generate much learning in themselves, and agile training

providers could use this opportunity to develop new learning objectives which acknowledge the circumstances. The time needed to do this may be a barrier for over-stretched supervisors and senior professionals, but junior colleagues could be asked to log their activities and new learning for review at a later date.

A major implication of education interruption is that learners may not achieve their competences within the usual timeframes. Clearly this will have consequences for individuals but there is also a system implication: in most countries, the healthcare workforce depends on medical and health professional students and doctors in training progressing in a timely manner. COVID-19 has the potential to hugely impact on the timelines of progression from student to fully-qualified professional, and on the progression of qualified staff to advanced practitioner.

Addressing disruptions to progression through training will require a multi-system and coordinated approach, such as, for example, graduating health professionals early or to time but providing a higher level of initial workplace supervision, or assessing new core competences in residents. Depending on context, this might require liaison between universities, schools, postgraduate training bodies, regulators and employers so new systems are fit for purpose and ensure learner and patient safety. Careful thought is needed regarding the ongoing education needs of learners who have a break in their studies to volunteer or are deployed to support clinical practice, and then return to study.

Linked to the above, although not explicitly stated, there was a sense that this time of disruption will pass and more junior learners will have time for “catching up”. This may be the case, but it may be challenging to create additional opportunities and achieve necessary training hours, where this is pertinent. Moreover, students nearing the time of graduation and more senior

residents will not have the luxury of catch up time. Many schools and training programmes may wish to prioritise the needs of those in their final months of training.

Theme 3: Selection and Assessment

Selection processes differ by context. Many use the combination of prior attainment, some sort of reference or candidate statement, perhaps an aptitude test, and then an interview (Cleland et al 2013; Patterson et al 2016). The first of these is usually provided via school-leaving examinations or national tests. These have been cancelled in many countries because of Covid-19 restrictions. This means admissions teams will not have a standard indicator of applicant prior attainment. Alternative indicators must be found. These might include estimates of attainment based on course work and/or school reports. These have the benefit of being more akin to programmatic assessment (Schuwirth and van der Vleuten 2011; see also https://amee.org/getattachment/home/Draft-2018-Consensus-Framework-for-Good-Assessment.pdf) than performance on a one-day examination, but how easy it will be to access such information will depend on the context, and may provide a major challenge to admissions teams. There was general agreement that technology could mediate mini-multiple interviews (MMI) in the admissions process, and an example of this is reported elsewhere in this special issue.

Colleagues reported significant disruption in the delivery of their high-stakes progression and summative assessments. Many institutions are exploring the use of technology enhanced assessment solutions for online knowledge testing, and delivery of 'online OSCEs', which involved structured oral examination components. A recent paper has reported successful re-design and delivery of a face to face OSCE whilst adhering to strict infection prevention

restrictions (Boursicot et al 2020), successfully using borderline method regression methods to standard set for small cohorts (Homer et al 2020). However, these options may not be feasible for institutions with limited resources. The use of adaptive and sequential test formats also provides an opportunity to deliver face-face tests differently (Pell et al., 2013; Currie, Sivasubramaniam & Cleland 2015). Overall progression decisions can be supported by programmatic assessment formats (Schuwirth and van der Vleuten 2011)

Academic malpractice in online examinations was a key concern for many attendees, for both MMI and high stakes tests. Various approaches to mitigating and managing malpractice were discussed. One suggestion was to have faith in probity pledges and remind students of their commitment to professionalism. Others included shifting from closed-book to open-book examinations, (allowing students to consult textbooks and notes during timed/locked down assessments) or converting exams to project work that is completed remotely, learning lessons from elsewhere in higher education (e.g., https://thesedablog.wordpress.com ; https://sally-brown.net).

Technology was also recognised as an opportunity to engage learners within an assessment for learning setting, both through different tasks and alternative formats (e.g. students designing and submitting online posters rather than physical ones). Although online approaches to assessment can seem an attractive solution, it is important that the consequences of technology based assessment are fully appreciated (Draft Ottawa Consensus Recommendations for Technology Enhanced Assessment 2020 - https://tinyurl.com/sjww5z8)

Theme 4: Educator needs

Last but certainly not least, many colleagues are anxious about the burden being put on them during this time of crisis. Even though we thought that the subject of resilience in students and staff could be deferred to the next webinar, it is clearly of such importance that it emerged as a specific theme in this webinar. This webinar was focused on educator needs, as was the discussion on this topic. Educators are feeling exhausted and overextended. The situation is ever changing. Many are working long hours trying to shift their teaching and assessments online, and/or delivering face-to-face teaching to smaller groups repeatedly. This is exacerbated for those educators who also have a clinical workload whose roles are shifting and expanding. The support for teaching, learning and assessment varies widely by context, is essential but invisible, and therefore potentially unrecognized and underappreciated, but people such as IT and administrative professionals are also under much pressure (MacLeod et al., 2017). There is, rightly, much focus on supporting students in this time of difficulty but the burden on staff must also be acknowledged. This may be an opportunity to extend communities of practice to include support staff, and/or to develop innovative, situated, micro-approaches to staff development (Baerheim and Raaheim, 2020).

There is a clear need to recognise that health professions' educators across the globe are doing their best, often with limited resources and tight infection control restrictions. Educators and clinicians are people too (Johnston and Cleland 2018). They will have their own anxieties about themselves, their families and significant others during this time. The longer the pandemic goes on, the more likely educators are to succumb to stress and burnout (see later in this special issue for 12 Tips on alleviating stress in students and faculty), particularly if their organisational culture is characterised by high expectations but low support (Schein 2009). We urge institutions and employers to acknowledge the efforts of HPEs to "keep the show on the road".

Drawing the above points together, there is clearly no one simple solution to the unprecedented issues medical education and training face currently. However, many local responses and innovations could have the potential to change the shape of medical education and training in the future. With this in mind, we end with a plea to colleagues to record and evaluate their educational innovations implemented in response to COVID-19. The world post Covid-19 is going to be a different world, socially, financially and educationally. The information collected during these difficult times will probably shape the future of health professions' education and training forever and in doing so, could just lead to real transformative and transformational learning for all of us.

Take home messages

- Share learning and resources across the global community of healthcare professions education.
- Technology and simulation can be used to deliver some, but not all, learning and assessment experiences, but there are challenges and concerns.
- Workplace-based learning, assessment and progression have been particularly hard-hit: systems and expectations need to adapt to acknowledge disruptions to learning.
- Educators, other essential staff and learners need support to manage challenges and additional burden.
- Keep records of responses and innovations: these may shape future education and training.

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