

Money Penny M, Alinier G, Attoe C, McCormack S. 2020 Simulation in the time of COVID 19. *BMJ Simulation and Technology Enhanced Learning*. 6: Ai-Aii

Simulation in the time of COVID 19

Coronavirus disease 2019 (COVID-19), filtering face piece-3 (FFP3), powered air-purifying respirator (PAPR), donning, doffing, shielding... A plethora of words and acronyms little known to the simulation community have been added to our lexicon. A year ago the pre-conference editorial referred to the challenges of an ageing population, complex treatments, limited resources, and out of hospital care (1). To those we must now add a pandemic which continues to have a colossal impact on society. The world has momentarily been paralysed in order to find strategies to minimise and control the spread of the virus. With the twin aims of minimising loss of life and not overwhelming healthcare systems, the economies of every country have suffered as our way of living, working, travelling, and doing business changed (2,3).

While many "routine" simulation sessions have decreased or even ceased, simulation based education (SBE) which is directly relevant to dealing with the particulars of an infectious agent has greatly increased (4,5). In the authors' own hospitals, simulation was used to prepare healthcare staff for doffing and donning personal protective equipment (PPE), proning ventilated patients, optimising patient pathways and much more. The pandemic has, in many ways, forced the simulation community to put its money where its mouth is. Years of extolling the benefits of simulation in terms of upskilling, rapid cycle learning and resilience was now put to the test.

The present

Although the situation may have changed once again by the time this editorial is published, the simulation community is adapting to the challenges and opportunities presented by COVID. Physical distancing and PPE requirements mean that training sessions have to be modified in scope, duration and/or setting (4). The number of participants per session is often kept to a minimum, the reliance on additional disposable supplies, including PPE, is not negligible, and new infection control measures with regards to the simulation equipment used

are being established and rigorously implemented. This represents a lot of additional work and demand on human and physical resources.

The push to online or distance learning has been a welcome one. Access to education should not be totally dependent on physical presence, nor should an inability to be present at a certain time or date preclude learners from being able to learn. Strides are being made in adapting the learning processes of simulation to online sessions, including developing psychological safety, use of human simulated patients remote from the learners, and modified approaches to debriefing. Educators have had to be innovative in their teaching and assessment practices to overcome the associated challenges (6,7).

We also appreciate that face to face sessions are still essential for learning and assessing many motor and interpersonal skills. This is especially true when many peoples' clinical exposure has been reduced due to the decreased clinical throughput and, especially at the beginning of the pandemic, a desire to reduce the numbers exposed to patients with COVID. We must also not forget our colleagues who are shielding for whom simulation can help maintain essential skills. This means that all modalities of simulation, which as Gaba says is "a technique - not a technology" (8), will still be required in the coming years.

The future

We encourage the increase in online learning (including virtual reality based learning) regardless of how the pandemic is resolved. Making sure the content of these online resources is current in terms of clinical guidance will become a greater challenge, while improved access to simulation training regardless of geography should be celebrated.

We continue to support accreditation of individuals, programmes and organisations through a robust review process (1,9). We know simulation is a double-edged sword. Done well it leads to faster acquisition of expertise with associated improved patient outcomes. Done poorly it can lead to psychological distress, "tick box" learning and threaten patient safety. Accreditation helps us all by demonstrating the achievement and maintenance of standards which were agreed by practitioners from across the UK. We also strongly support our technical members through their own journey of professional registration with The Science Council, and as we look ahead, we eagerly await the announcement of the apprenticeship route for SBE Technicians.

We will continue to strengthen links with national bodies such as Health Education England (HEE), NHS Education Scotland (NES), Health Education and Improvement Wales (HEIW) and the Northern Ireland Medical and Dental Training Agency (MDTA), as well as the various Colleges and Councils. The expertise of its members allows and, one might say, compels ASPIH to add to the dialogue around the allocation of resources to SBE, the maintenance of standards, methods of assessment, etc., in view of promoting patient safety and improving the competencies and wellbeing of all social and healthcare staff.

Conclusion

As with so many other organisations and people, ASPIH's resilience was challenged by recent events. From "business as usual" to furloughs, increased clinical commitment, and a cancellation of face to face conferences, the executive and conference teams worked together to keep the show on the (virtual) road. We thank those of you who joined us at our 2020 conference.

Although it will be some time before we can answer the question of whether or not the simulation community rose to the challenge of COVID, early indications are very positive. As the abstracts in this supplement demonstrate, simulation based educators have built on strong foundations to prepare and respond to this novel situation. We, who work in health, social care, and education, will need to play our part in establishing the "new normal" with our patients, carers, and families. All of us at ASPIH look forward to making that journey with you.

References:

- 1- Higham H, Morrow M, Laws-Chapman C, *et al*. The role of ASPIH in simulation-based education. *BMJ Simulation and Technology Enhanced Learning* 2019;**5**:Aiii-Aiv
- 2- Buheji M, da Costa Cunha K, Beka G, Mavric B, de Souza YL, da Costa Silva SS, Hanafi M, Yein TC. The extent of covid-19 pandemic socio-economic impact on global poverty. a global integrative multidisciplinary review. *American Journal of Economics*. 2020;**10**(4):213-24.
- 3- Nicola M, Alsafi Z, Sohrabi C, Kerwan A, Al-Jabir A, Iosifidis C, Agha M, Agha R. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International journal of surgery (London, England)*. 2020 Jun;**78**:185.
- 4- Dieckmann P, Torgeirsen K, Qvindesland SA, Thomas L, Bushell V, Langli Ersdal H. The use of simulation to prepare and improve responses to infectious disease outbreaks like COVID-19: practical tips and resources from Norway, Denmark, and the UK. *Advances in Simulation*. 2020 Dec;**5**:1-10.

- 5- Li L, Lin M, Wang X, *et al.* Preparing and responding to 2019 novel coronavirus with simulation and technology-enhanced learning for healthcare professionals: challenges and opportunities in China. *BMJ Simulation and Technology Enhanced Learning* 2020;**6**:196-198.
- 6- Major S, Sawan L, Vognsen J, *et al* COVID-19 pandemic prompts the development of a Web-OSCE using Zoom teleconferencing to resume medical students' clinical skills training at Weill Cornell Medicine-Qatar. *BMJ Simulation and Technology Enhanced Learning* Published Online First: 05 May 2020. doi: 10.1136/bmjstel-2020-000629
- 7- Sandars J, Patel R. The challenge of online learning for medical education during the COVID-19 pandemic. *International journal of medical education*. 2020 Aug 21;**11**:169-70.
- 8- Gaba DM. The future vision of simulation in health care. *BMJ Quality & Safety*. 2004 Oct 1;**13**(suppl 1):i2-10.
- 9- Major D, Wright D, Purva MP. 59 Sharing the experience; achieving the ASPiH organisation accreditation. *BMJ Simulation and Technology Enhanced Learning* 2019;**5**:A87.

Michael Money Penny, BSc(Hons), MBChB(Hons), MD, FRCA, FHEA

- Educational Coordinator, Scottish Centre for Simulation and Clinical Human Factors, Larbert, Scotland
- Consultant (Anaesthetics), Forth Valley Royal Hospital, Larbert, Scotland

Guillaume Alinier, PhD, MPhys, PgCert, SFHEA, NTF

- Professor of Simulation in Healthcare Education & National Teaching Fellow (2006), School of Health and Social Work, University of Hertfordshire
- Director of Research, Hamad Medical Corporation Ambulance Service, Doha, Qatar
- Adjunct Professor of Education in Medicine, Weill Cornell Medicine – Qatar, Doha, Qatar
- Visiting Fellow, Faculty of Health and Life Sciences, Northumbria University, Newcastle upon Tyne, United Kingdom

Chris Attoe, MSc

- Head of Research & Development, Maudsley Learning, South London & Maudsley NHS Foundation Trust, UK

Samantha McCormack MSc, CSci, FHEA, MIScT

- Technical Manager, Buckinghamshire New University, UK