

Simulation training: our passport to a successful future in medicine

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WORKING IN HEALTHCARE

One only needs to open any newspaper or twitter feed to witness the adversities that those working in every forum of healthcare are experiencing.¹ They discuss the struggles, frustrations and crises that are ongoing in the healthcare setting throughout the world. Although some of these dominate our headlines, it is time to refocus our attention on our patients, the care they are receiving and ways of improving the training of our future doctors, in the face of exponential change in medical technology and healthcare.

Although physician burnout has always been an unfortunate but ever-present reality of medical practice, increasing levels of stress and increased the clinical burden in the setting of staff attrition are pushing doctors to breaking point.²⁻⁴ This is one factor that has been cited by doctors who have mass migrated to sunnier climes, with the Health Workforce Research Group based at the Royal College of Surgeons of Ireland noting that over 50% of medical trainees are reporting increased work-related stress and reduced staffing levels in our jurisdiction.⁵ This coupled with perceived better opportunities abroad is leading to a 'brain-drain' of some of the sharpest and most talented home-grown physicians.⁶

The introduction of the European Working Time Directive (EWTD) in 1993 and gradual transposition into law was an initiative to prevent employees from working excessively long hours, to the detriment of their physical and mental health, as well as that of those they treat.⁷ This has subsequently led to a reduction in rostered working hours, and compliance with the reported compliance with a 48-hour working week standing at 85% by January 2018.⁸ In spite of this, many doctors continue to work far in excess than 48 hours when training time, study

time and continuing professional development activities are included.^{9 10}

WORKING IN OBSTETRICS AND GYNAECOLOGY

Obstetrics and Gynaecology is no different from other specialties, with many challenges facing trainees and the services they work in, having a deleterious effect on both themselves and their patients.

Maternity services are regularly subjected to negative reports in the media, further adversely impacting staff morale along with the escalating confrontational blame culture around the medicolegal landscape. These factors have led to growing attrition rates among trainees in Obstetrics and Gynaecology,¹¹ reduced training time for those working in the area despite the little amendment to the length, scope or methods of education in our training programmes.¹²

SIMULATION IN OBSTETRICS AND GYNAECOLOGY

Given these challenges, we must regroup, confer and ensure that women, their babies and families continue to receive the world-class standard of care that they are accustomed to, by increasing innovation in our training programmes. Some countries and postgraduate education bodies, such as those in the UK and the Royal College of Obstetrics and Gynaecology (RCOG) have embraced these challenges, with the RCOG launching a Simulation Advisory Network, providing simulation sessions such as the ROBuST (RCOG Operative vaginal Birth Simulation Training) courses ensuring that simulation training becomes a mandatory part of their curriculum.

Although this surge in innovation has been seen in some other specialties, such as in Surgery^{13 14} and Anaesthesiology,¹⁵ Obstetrics and Gynaecology needs to catch up and, indeed, surge forward, in opening new frontiers to provide continued exceptional training at the highest level. In recent years, both Basic and Higher Specialist Trainees in Obstetrics and Gynaecology in Ireland have been fortunate to gain hands-on experience in novel training techniques such as ultrasound simulation and hands-on cadaveric courses in gynaecological and laparoscopic

surgical skills as well as obstetric anal sphincter injury.

Trainees also have the opportunity to attend national and international simulation courses in conjunction with the multidisciplinary team, such as Multidisciplinary Obstetrics-Gynaecology and Anaesthesiology (MOGA) simulation programmes, Managing Obstetric Emergencies and Trauma (MOET) and Practical Obstetric Multi-Professional Training (PROMPT). Furthermore, cadaveric courses such as the Anatomy of Complications Workshops largely based in the Southern Hemisphere (the inaugural Northern Hemisphere course took place in ASSERT (Application of Science to Simulation Education Research and medical Technology) Centre, University College Cork in August 2018 and minimally invasive surgery training in Strasbourg, France provide exceptional experience to bring back to our shores. These more advanced training courses are usually at the financial cost of participants and can involve significant travel, pre-course work and stress, without necessarily accruing compensatory time off on the participants return.

SIMULATION IS THE FUTURE

Looking to the future, the onus is on medical educators and senior figures within the specialty to investigate further ways to break barriers such as the cost and time pressures that people experience when pursuing innovative training opportunities and entice doctors to maintain their practice in their country of training long term.

Continuously, reports in maternal morbidity and mortality show that consideration should be given to simulation training to maximise care and outcomes.¹⁶ Such programmes have led to the introduction of many low-fidelity training courses with large amounts of success.¹⁷

We should thus embrace the next level of simulation in the form of high-fidelity simulation. With advances in technology, it is now feasible to introduce innovative simulation training and incorporate realistic 'at the bed-side' scenarios, giving participants unprecedented opportunities to acquire, develop and maintain essential knowledge, skills, values and behaviours needed for safe and effective patient care. This is particularly important in the field of Obstetrics and Gynaecology, a hands-on specialty where time is of the essence, and where simulation has been shown to improve the response time and actions of practitioners in a multidisciplinary setting.¹⁸ In September 2018, the inaugural 'Advanced Practical Skills in Labour Ward' course took place

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in the ASSERT, Cork in conjunction with the Royal College of Physicians of Ireland which showcased the future of training and simulation. This has been complemented in ASSERT by laparoscopic skills courses for Higher Specialist Trainees and going forward in 2019 will include sub-specialist courses in gynaecology and urogynaecology and general surgical specialities. Through participation in real-time simulation sessions, trainees have the opportunity to practice essential skills in an environment that allows feedback, debriefing and 360-degree helicopter learning.

The further provision of these training opportunities to all levels of trainees in Obstetrics and Gynaecology will allow us to overcome the obstacles that our trainees are currently experiencing and maximise hands-on training time. Experiencing challenging scenarios in a high-fidelity simulation setting will also allow doctors an opportunity to deal with stressful situations and their aftermath, which can be significant contributors to burnout and work-related stress. In addition, this high-fidelity simulation affords us the opportunity to concentrate on the improvement of communication skills¹⁹ with colleagues and patients, an important skill which is often neglected and one in which deficiencies can contribute to work-related stress and poor patient experiences.²⁰

As we face several significant challenges over the coming years, managing factors such as physician burnout, the training limitations post-EWTD compliance, flexible training programmes, academic training programmes and migration, we should strive to maximise the use of educators and resources that are readily available on our doorsteps. Maximising the use of these resources will help doctors

to look after themselves and their patients while improving obstetric education and training through the incorporation of cutting-edge training techniques and technology.

Contributors CMC and OOS: involved in the drafting of the manuscript. OOS and BOR: responsible for the inception of the manuscript. CMC, OOS and BOR: all reviewed and approved the final draft of the manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests OOS and BOR have received honoraria to attend medical conferences.

Provenance and peer review Not commissioned; internally peer reviewed.

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To cite McCarthy CM, O'Sullivan OE, O'Reilly BA. *BMJ Stel* 2020;**6**:67–68.

Received 30 May 2019
Accepted 10 June 2019
Published Online First 29 June 2019

BMJ Stel 2020;**6**:67–68.
doi:10.1136/bmjstel-2019-000491

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