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COVID-19 significantly affects specialty training

The complexities of modern medicine have made specialisation of patient care an inevitable necessity. In Australia, individual medical colleges are responsible for selection, accreditation, overall supervision and supporting the well-being of trainees. Progression through training is based on work-based assessments and examinations. Specialist training must fulfil highly stringent requirements over a minimum of 4–6 years to gain mastery of knowledge, skills and professional attributes.

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The unprecedented Coronavirus disease 2019 (COVID-19) pandemic has severely disrupted this streamlined process of specialisation. Selection into training and entry/exit examinations has been cancelled due to social gathering laws and perceived risks to patients and practitioners. Re-deployment away from usual training roles and suspension of all non-essential procedures and surgeries have limited trainees' specialty knowledge and skill acquisition, interrupting progression through training. Postponement of conferences and workshops has further affected professional development and networking opportunities. These changes have tremendous implications to the strained medical workforce, in turn, affecting trainees' psychological well-being.

A paradigm shift from the traditional models of specialty training is needed to address the challenges presented by this unrelenting outbreak. While temporary solutions, such as rescheduling exams, waiver for certain training requirements and training time extension may help alleviate anxiety, novel models of training, assessment and support need to be developed.

The main impact of COVID-19 is upon procedure-based specialties where reduced volume of work threatens acquisition of procedural competency. In addition, certain procedural techniques have been significantly modified to enhance personal safety. For instance, aerosol-generating procedures, such as bronchoscopies, are now performed with Level 3 (enhanced) personal protective equipment.[1] General anaesthesia and closed-circuit ventilation are currently recommended for most airway procedures.[2] For non-procedural specialities, there is also added complexity in initial assessment and management of patients under droplet/airborne precautions. Trainees now need to learn how to navigate through these barriers.

With most planes grounded, pilots are using flight simulators to maintain their skills. In Formula 1, the real-world racing has been replaced with virtual Grand Prix. In medicine, simulation training has been shown to improve procedural skills, clinical approach and situational awareness.[3] Simulator tools include mannequins, interactive participants, such as 'mock patients' or virtual reality software. Procedures can be performed in a safe virtual environment, technical skills assessed against pre-specified benchmarks, and instantaneous feedback provided.[4] In the United States, a web-based laparoscopic surgery module and standardised virtual hands-on training component has been made mandatory for all surgical residents.[5] Virtual interactive cases may also offer a validated form of clinical experience to non-procedural specialty trainees.[6] Balancing the fidelity, realism and cost effectiveness of virtual training programmes against the limitations placed by COVID-19 would be integral to future training models. Further research should focus on integrating simulation-based medical training programmes into current curriculums to reflect college requirements.

This global crisis has presented us with an invaluable opportunity to experience a generalist role in parallel to speciality medicine as a result of cross-disciplinary exposure to clinical care, public health, epidemiology and healthcare systems. Through this journey, we all can further develop professionalism and humanitarianism.

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