

Surgical skills and COVID-19 pandemic: Impact and way forward

Scottish Medical Journal
2022, Vol. 67(2) 49–50
© The Author(s) 2022
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/00369330221095709
journals.sagepub.com/home/scm



Ghulam Nabi

The Covid-SARS-19 pandemic has changed the global ways of life, impacting various domains of living such as social life, national economies, work, and temporary curtailing of opportunities in surgical training.^{1,2} The temporary cessation of skill courses and conferences by the organisations and professional bodies have impacted training of future surgical workforce. In this issue Ms Gowda et al.³ report, impact of Covid-19 pandemic on the technical skills of urology trainees attending national BOOTS camp.⁴ The study finds a detrimental effect of pandemic on the technical skills of trainees, whereas a similar study by Etheridge et al. from Singapore⁵ showed an improvement in non-technical and team management skills. Improvement in teamwork during disasters has also been observed in other area.^{6,7} Together with other publications, the published literature provides background for the future policy making in surgical training. The observations reported by the authors suggest that lack of exposure to real-life surgical skills particularly in complex tasks such as laparoscopic suturing has resulted in poor technical skills gain by the trainees.⁸ The role of simulation can help in retaining basic surgical skills and principles upto a point, but further refinement is only possible through operating on patients in surgical operating room environment. A drop in upto 60% of operative volume based on a review of operating logbooks of trainees in Europe and USA provides us idea of the challenge we are likely to face in the post-covid era.

The virtual technology has brought some solution to the challenge of continuing surgical technology during Covid-19 pandemic. There are several examples to learn from. The Japanese Society of Gastrointestinal Surgery (JCOG) uses video reviews to assess competence of surgeons in cancer surgery, certificate courses in minimally invasive surgery (MIS) and web version of the Non-Technical Skills for Surgeons Workshop (NOTTS) are just a few to mention. The use of technology can be combined with smart redesigning of services to address the cumulative training deficit acquired over the past two years. A collective wisdom and leadership with right persuasion skills and power can bring those changes. Unless, we put in place arrangements for the training of future generation of surgeons, the quality of surgeons and specialities of surgery

are going to face residual impact of pandemic for time to come.

This issue has further highlighted issue of poor knowledge in digital health technologies amongst medical students across 9 universities in the UK. Nazeer et al.⁹ report that less than half of the students responding to survey were not even aware of digital health. This is a significant alarm as future workforce needed for the delivery of health-care needs focused attention in training them for digital technology driven healthcare.

The present issue also highlights and furthers our understanding in two neurological conditions. Ozcan and Ozisler¹⁰ show a higher correlation between lower urinary tract symptoms (LUTS) and recovery phase functional outcome in stroke patients. We already knew that patients with stroke will suffer from LUTS, but this study adds to our observation that functional outcome following stroke during rehabilitation affects LUTS. Rankin et al.¹¹ report diagnosis of subarachnoid haemorrhage using spectrophotometry of cerebrospinal fluid. They contextualise their findings in relation to CT scan-based diagnosis of the disease.

I trust the issue will be an enjoyable reading for you and look forward to hearing from you.

References

1. Nabi G. COVID-19 pandemic, recovery, dark realities of healthcare and road ahead. *Scott Med J* 2021; 66: 49–50.
2. Nabi G. Simulation as a tool for learning surgical craft in COVID-19 era. *Scott Med J* 2020; 65: 39.
3. Gowda S, Swamy GK, Veerattepillay R, et al. Tangible effects of the COVID-19 pandemic: a fall in dexterity amongst surgical trainees? *Scott Med J* 2022; 67(2): 51–55.
4. Berridge C, Kailavasan M, Athanasiadis G, et al. Endoscopic surgical simulation using low-fidelity and virtual reality trans-urethral resection simulators in urology simulation boot camp course: trainees feedback assessment study. *World J Urol* 2021; 39: 3103–3107.

Corresponding author:

Ghulam Nabi, Head of Research Division of Imaging Sciences and Technology, School of Medicine, University of Dundee, Ninewells Hospital, Dundee, Scotland, UK, DD1 9SY.
Email: g.nabi@dundee.ac.uk

5. Etheridge JC, Moyal-Smith R, Sonnay Y, et al. Non-technical skills in surgery during the COVID-19 pandemic: an observational study. *Int J Surg* 2022; 98: 106210.
6. Sandvik AM, Bartone PT, Hystad SW, et al. Psychological hardiness predicts neuroimmunological responses to stress. *Psychol Health Med* 2013; 18: 705–713.
7. Bartone PT. A new taxonomy for understanding factors leading to suicide in the military. *Int J Emerg Ment Health* 2013; 15: 299–305.
8. Khan KS, Keay R, McLellan M, et al. Impact of the COVID-19 pandemic on core surgical training. *Scott Med J* 2020; 65: 133–137.
9. Nazeer MNM, Baig H, Subeh A, et al. Multicentric analysis of the perceptions and knowledge of digital health amongst undergraduate medical students. *Scott Med J* 2022; 67(2): 56–63.
10. Ozcan F and Ozisler Z. The relationship between urinary symptom severity and functional Status in patients with stroke. *Scott Med J* 2022; 67(2): 64–70.
11. Rankin S, McGuire J, Chekroud M, et al. Evaluating xanthochromia in the diagnosis of subarachnoid haemorrhage in Scotland in the era of modern computed tomography. *Scott Med J* 2022; 67(2): 71–77.