

Assessing the skillset of surgeons facing the COVID-19 pandemic

Editor

Hospitals around the world took measures to absorb the potential and actual influx of patients due to COVID-19 by reducing surgical activity and maintaining surgical emergencies¹⁻³. Surgeons are at the forefront of disaster management, but the pandemic requires primarily medical and intensive care^{4,5}. As such, we may find ourselves out of our comfort zone when tasked with dealing with COVID-19 patients⁵. A survey undertaken on 23 March 2020 involved 63 surgeons and residents (Table 1). More than half answered negatively to questions relating to ICU skills other than their ability to ventilate using a balloon. More positive answers were given to questions pertaining to general medical skills and triage. Knowledge

of the skillset of the hospital's clinical staff can allow accurate redistribution of resources and preparation for future pandemic issues through training. The COVID-19 pandemic has significantly changed the landscape around us, and may have a lasting impact⁶ with new waves of issues coming⁷ that will impact surgical services⁸ and staff safety⁹.

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Table 1 Skillset of surgeons facing the COVID-19 pandemic

	No. of surgeons with skill (n = 63)
General medical	
Knowledge of personal protective equipment?	45 (71)
Do you know how to place an infusion?	56 (89)
Can you interpret an arterial blood gas (arterial blood gas analyser or gasometry)?	45 (71)
Do you know how to place a urinary catheter?	53 (84)
Do you know how to place a peripheral intravenous access (cannula, venflon)	56 (89)
Knowledge in the management of antibiotics?	38 (60)
Do you know how to manage fractures?	52 (83)
Do you know how to deliver a baby?	13 (21)
ICU	
Can you intubate?	19 (30)
Do you know how to place a central line?	16 (25)
Do you know how to use a laryngeal mask airway?	7 (11)
Can you ventilate with a mask/balloon	41 (65)
Basic knowledge of a respirator?	12 (19)
Advanced ventilator knowledge?	0 (0)
Basic knowledge of non-invasive ventilation?	13 (21)
Advanced knowledge of non-invasive ventilation?	0 (0)
Knowledge of emergency-specific drugs?	18 (29)
Knowledge of specific drugs in resuscitation?	4 (6)
Establishment and knowledge of ECMO?	8 (13)
Basic knowledge of cardio-respiratory monitoring	32 (51)
Knowledge of cardioversion + defibrillation	19 (30)
Do you know how to manage a polytrauma patient?	46 (73)
Knowledge of disaster medicine?	7 (11)

Values in parentheses are percentages. ECMO, extracorporeal membrane oxygenation.

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