

## Aftermath of COVID-19: Adieu Stethoscope?

Sir,

Recent outbreak of COVID-19 has greatly influenced the practice of anesthesiology and critical care by throwing unique challenges for anesthesiologists. The nature of spread of this virus has put a big question mark on the utility of stethoscope in our practice. A recent article highlights the precautions to be undertaken while intubating patients with COVID-19.<sup>[1]</sup> They have pointed out that confirming the depth of the tracheal tube is extremely difficult using auscultation while wearing isolation suits. They have suggested observing bilateral chest expansion, ventilator breathing waveform, and end-tidal capnography as better indications of successful tracheal intubation. We suggest point-of-care ultrasonography for the confirmation of proper placement of the tracheal tube in these settings. It has been shown that ultrasonography, capnography, and conventional clinical auscultatory methods have comparable sensitivity and specificity in identifying tracheal or esophageal position of the tracheal tube. However, correct position of the tube is detected faster with ultrasound compared to the other two methods.<sup>[2]</sup> The speed of detection becomes more important when it has been recommended to attempt rapid sequence induction in patients with COVID-19.<sup>[1]</sup> Safety of healthcare workers during the airway management of patients with COVID-19 should be of paramount importance.<sup>[3]</sup> It is difficult to have specific covers for a stethoscope, leading to a higher probability of a nosocomial spread of the virus.<sup>[4]</sup> It has also been suggested that during an outbreak such as COVID-19, there is also a need to guarantee the patient's right to be evaluated according to the highest standards of care.<sup>[4]</sup> In this scenario, the use of point-of-care lung ultrasonography for the evaluation of successful and correct tracheal intubation not only fulfils all the objectives but also eliminates the use of a potential source for virus spread.

Based on the current experiences, lung ultrasonography has proved useful to diagnose pneumonia as well as to monitor and follow-up patients with COVID-19.<sup>[5]</sup> This view is based on the widespread availability of ultrasonography in healthcare setups worldwide, its portability, and the objective of standardization of diagnosis and treatment protocols. Wireless probe and tablets are recommended as the most appropriate ultrasound

equipment in the setting of COVID-19. It is possible to wrap these in single use plastic covers to reduce the risk of contamination and ease sterilization procedures.<sup>[4]</sup> They are also less expensive than usual ultrasound machines including the portable ones.

Portable machines dedicated to the exclusive use of COVID-19 patients must have probe and keyboard covers, and sterilization procedures must be carried out as per recommendations.<sup>[6]</sup> The iconic stethoscope has been the symbol and pride of the physicians worldwide for more than two centuries. With pandemics like COVID-19, digital technology is bound to take over heralding a paradigm shift in the bedside clinical diagnosis tools.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

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Letter to Editor

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<b>Quick Response Code:</b> 	<b>Website:</b> <a href="http://www.ijrconline.org">www.ijrconline.org</a>
	<b>DOI:</b> 10.4103/ijrc.ijrc_29_20

**How to cite this article:** Dubey PK, Dubey P, Dubey N. Aftermath of COVID-19: Adieu stethoscope?. *Indian J Respir Care* 2020;9:245-6.

**Received:** 09-04-2020

**Accepted:** 10-04-2020

**Published:** 19-06-2020

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