

COVID-19 pandemic: The testing times for healthcare workers

Nitish Aggarwal¹, Tarun Krishna Boppana², Saurabh Mittal³

¹Department of Urology, All India Institute of Medical Sciences, New Delhi, India; ²Nottingham Trent University, UK;

³Department of Pulmonary, Critical Care and Sleep Medicine, All India Institute of Medical Sciences, New Delhi, India

Dear Editor,

There is an increasing pressure on healthcare systems around the globe since the onset of the current coronavirus disease 2019 (COVID-19) pandemic to cope up with the increasing workload [1]. As most governments realized the situation well in time, the hospital beds and other equipment were made readily available for public hospitals. However, the systems still suffered from the scarcity of trained healthcare professionals, including doctors, nurses and other supporting staff. Due to varied medical and surgical specialties, all doctors are not equally trained in handling coronavirus disease 19 (COVID-19) patients who commonly have respiratory failure requiring intensive care unit admission. This has led to a sense of guilt as well as incompleteness in many junior resident doctors working in COVID care areas.

Gallagher et al. in a recent article in the New England Journal of Medicine have explained the roles and responsibilities of medical students in COVID-19 pandemic and how it has affected their learning [2]. The article describes in detail the concerns as well as the sense of responsibility among Internal Medicine, Pulmonary Medicine and Critical care fellows. However, there are concerns of resident doctors from other specialties which need to be addressed. This aspect of the involvement of other specialties during pandemic times is crucial to the current scenario in India. Resident doctors from various non-medicine specialties (including pre-clinical, para-clinical and surgical specialties) are also being posted in the COVID hospitals. Their involvement in patient care

varies depending upon their expertise and includes direct COVID patient care, communication with family members, as well as handling aspects related to their specialty. There has been a paradigm shift in the working environment of these trainees from such as operating a kidney tumour to managing hypoxemia in ICU. Their training in their own specialty is also compromised due to rising pandemic in the country [3,4]. Providing encouragement and using simulator-based training for procedural aspects can improve functioning and reduce the training gaps.

Regarding management of hypoxemia in these patients, there is emerging evidence regarding the effectiveness of non-invasive oxygen strategies (such as non-invasive ventilation and high flow nasal cannula) as well as prone positioning [5,6]. The use of NIV, as well as HFNC, is associated with the higher aerosol generation and puts the HCWs at risk. To circumvent this issue, the use of a surgical mask by patients is recommended while on nasal prongs or HFNC [7] Appropriate use of personal protective equipment is essential in such situations. Also, the use of prone positioning in intubated patients is a labour intensive work and leads to tiredness and sense of fear among already overburdened healthcare workers (HCWs). The need for using PPE has also led to dissatisfaction and frustration among healthcare workers. The essential component of PPE is a gown, gloves, surgical mask or N95 respirator and face shield or goggles. The hospitals need to provide adequate training for PPE usage as improper use may lead to spread of infection [8]. The filtering efficiency of various masks also depends upon fitting, and the HCWs should be able to choose the device best suited for them depending upon the size of their face. Working with PPE has led to a reduction in the efficiency of HCWs. Due to longer duty hours, the restriction on eating and use of toilets, *etc.* have increased these problems. Keeping these issues in mind, it is advised to have a smaller number of HCWs caring for infected patients, especially during aerosol-generating procedures, which in turn reduces the exposure of junior doctors, thus affecting their training. Although most governments have responded well to make all PPE available to the HCWs, there are places where re-use is common, and this instils a sense of fear among healthcare workers.

To summarize, the current pandemic has taken a toll on physical health, mental health as well as training of healthcare workers. However, we need to continue to work with our best abilities and using appropriate precautions as we all hope that “there is light at the end of the tunnel”.

Correspondence: Saurabh Mittal, Assistant Professor, Department of Pulmonary, Critical Care and Sleep Medicine, All India Institute of Medical Sciences, Ansari Nagar, New Delhi 110029, India.
Tel. +91.11.26546346.
E-mail: saurabh_kgmu@yahoo.co.in

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