

WHO Guidelines on PPE Use for COVID-19 are Questioned



The existing guidelines on special separation in healthcare facilities are based on scarce and outdated evidence, a study has found.

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According to a globally accepted rule of infection control, when performing triage, medical staff do not need any personal protective equipment (PPE) if they maintain at least 1 metre's distance from a COVID-19 patient. A systematic <u>review</u> of 10 studies, conducted by a team of researchers from the University of New South Wales (UNSW) and the Massachusetts Institute of Technology (MIT), found that the above rule is based on outdated data and insufficient evidence.

The authors aimed to review the evidence for horizontal distance travelled by droplets and the guidelines issued by the World Health Organization (WHO), the U.S. Centers for Disease Control and Prevention (CDC) and European Centre for Disease Prevention and Control (ECDC) on respiratory protection for COVID-19.

They note that WHO has issued <u>guidelines</u> for contact and droplet precautions for healthcare workers caring for suspected COVID-19 patients, including an advice to staff to wear a medical face mask, but not a respirator when caring for COVID-19 patients. The use of respirators is reserved for aerosol generating procedures, such as intubation and resuscitation. At the same time, t he CDC has initially <u>recommended</u> airborne precautions.

The 1-2-metre distancing rule is central to droplet precautions and assumes that large droplets do not travel further than 2 metres. As co-author and Professor of Global Biosecurity at the UNSW's Kirby Institute, Raina MacIntyre, told ABC News, it had been around for 80 years and "never been questioned."

From the initial sample of 393 papers, the UNSW-MIT team reviewed 10 most-relevant ones, all published after 2005. They found that the evidence base for current guidelines is sparse, and the available data do not support the 1-2-meter rule. According to their results, eight studies showed droplets could travel more than 2 metres, while for particles of various sizes the distance would be from 1.4 to 8 metres. Furthermore, available studies show that airborne transmission of SARS-CoV-2 is possible and droplet vs. airborne transmission routes cannot be neatly separated.

The authors conclude that the 1-metre spatial separation limit or droplet precautions, and associated recommendations for staff at ports of entry, are not based on current scientific evidence, noting there is evidence that droplet precautions are not appropriate for SARS-CoV-2.

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