

Personal Protective Equipment and healthcare worker Safety in the COVID-19 Era (The PPE-SAFE survey)

A survey to describe availability and use of Personal Protective Equipment (PPE) by health care workers worldwide and variations within and between countries in the setting of the COVID-19 pandemic.

Protocol

V 1.11

Dated 31/03/2020

Protocol

Objectives: To describe availability and use of PPE by healthcare workers (HCW) caring for COVID-19 patients who require intensive care unit (ICU) treatment worldwide and variations within and between countries.

Rationale

Information on human-to-human COVID-19 transmission is still emerging [1]. Respiratory droplets are considered as the main route of transmission. Other likely routes include the inhalation of aerosols produced during aerosol-generating procedures. A recent experimental study described the viability of SARS-CoV-2 in aerosols throughout the 3 hours duration of the experiment [2]. Guidelines for PPE vary: airborne precautions are recommended only for high-risk procedures in some countries and routinely in others [3–6]. Types of Respiratory filtering facepiece (FFP)-masks are systematically indicated as part of the respiratory precautions as additional isolation measures with airborne risk. Reports of PPE shortage are emerging from multiple locations [7, 8]. Healthcare workers report reusing or fabricating their own PPE. Reporting of current practices in ICUs and PPE availability is urgently warranted.

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2. Yahav D, Franceschini E, Koppel F, et al (2018) Seven Versus 14 Days of Antibiotic Therapy for Uncomplicated Gram-negative Bacteremia: A Noninferiority Randomized Controlled Trial. *Clin Infect Dis*. doi: 10.1093/cid/ciy1054
3. Group AC-19 W (2020) The Australian and New Zealand Intensive Care Society (ANZICS) COVID-19 Guidelines, version 1
4. World Health Organization (WHO) (2020) Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19). WHO
5. The First Affiliated Hospital ZUS of M Handbook of COVID-19 Prevention and Treatment
6. Surviving Sepsis Campaign: Guidelines on the Management of Critically Ill Adults with Coronavirus Disease 2019 (COVID-19)
7. Mason DJ, Christopher RF (2020) Protecting Health Care Workers Against COVID-19—and Being Prepared for Future Pandemics. <https://jamanetwork.com/channels/health-forum/fullarticle/2763478>. Accessed 23 Mar 2020
8. Rosenbaum L Facing Covid-19 in Italy — Ethics, Logistics, and Therapeutics on the Epidemic’s Front Line. *N Engl J Med* 0:null . doi: 10.1056/NEJMp2005492

Methods

Survey Design

We will use a custom-designed survey using the survey-monkey online platform. It will be tested by management committee members and by clinicians with relevant experience not in the management committee for flow, content and administration. Iterative adaptation will be performed based on tester feedback.

The survey will be designed to be short and not take more than 5-8 minutes to complete. Part 1 will be some basic personal and institutional demographics. No identifying data (such as name, date of birth) will be collected. Part 2 will ask questions regarding types of PPE that are available to respondents, relevant training they have received, and their perceptions of whether available PPE and training are sufficient.

Survey population

Given the urgency surrounding HCW safety and the COVID-19 pandemic, our aim is to broadcast the survey to as many frontline HCWs as possible. The target population includes doctors of all training levels, nurses of all training levels and allied health staff involved in the care of critically ill patients with suspected or confirmed COVID-19 worldwide. We will not attempt to capture a true denominator, instead focussing on breadth of distribution. We will disseminate the survey through all means available to the management committee including the following:

1. European Society of Intensive Care Medicine mailing list
2. Australia New Zealand Intensive Care Society mailing list
3. Australian College of Critical Care Nurses mailing list
4. European Society of Clinical Microbiology and Infectious Diseases
5. Personal networks of management committee members
6. Social media (Twitter accounts of management committee members)

We will also ask respondents to forward the survey to their contacts for snowball sampling.

Endorsement has been obtained from:

European Society of Intensive Care Medicine (ESICM)

European Society of Clinical Microbiology and Infectious Diseases Study Group for Infections in Critically Ill Patients – ESGCIP

Pending: Brazilian Research in Intensive Care Network BRICNET

Request pending: The Australian and New Zealand Intensive Care Society (ANZICS)

Settings : All HCWs in ICUs worldwide that consent responding

Ethical considerations

Exemption from full ethical review and approval as a quality assurance activity has been granted by the 6Human Research Ethics Committee, Royal Brisbane and Women's Hospital, Brisbane, Australia LNR/2020/QRBW/63041

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