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LETTERS

THE SCANDALS OF COVID-19

Covid-19: Exposing frontline NHS staff to dangers by asking them to reuse PPE

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Abbasi has aptly pointed out a few scandals around the pandemic we are facing.[1] In this context a pertinent matter is personal protective equipment (PPE) for frontline NHS staff.

In 2018 the Health and Safety Executive (HSE) England explored the required PPE for frontline staff during the care of highly infectious patients.[2] Some of the key conclusions of this study were that basic PPE was insufficient to protect staff. The basic and enhanced levels of PPE, including several iterations of enhanced PPE, were tested as well as donning and doffing processes.

This exercise revealed extensive contamination of PPE when working with infectious patients. The findings were published.[3] The maximum contamination of PPE occurred on the hands and forearms (731 events out of 1168 contamination events) on the PPE. This was followed by contamination of the lower body, legs, and feet (431 events) and the upper body, shoulders, and upper arms (321 events). The findings also led to the view that the doffing process should be supervised but not assisted in order to control contamination of other staff.

Collectively the upper and lower body areas represented one third of all contamination events and therefore appropriate masks, well fitting googles, visors, gowns, and aprons afforded protection to these areas in combination with double (or triple) layers of gloves.

The use of a gown on hospital wards provided protection if the material was water repellent or waterproof, but its importance was unquestionable.

In the light of this, the advice to NHS staff for reusing PPE does not seem to be in order. It is also not understood what steps the Ministry of Health, HSE, and Public Health England took to procure PPE or train NHS staff in order to combat a scenario such as the current covid-19 pandemic.

Competing interests: None declared.

Full response at: www.bmj.com/content/369/bmj.m1434/rr-18.

1 Abbasi K. The scandals of covid-19. *BMJ* 2020;369:m143410.1136/bmj.m1434.
2 Health and Safety Executive England. Evaluation of existing PPE worn by NHS staff for assessment of a patient with a suspected high consequence infectious disease. Report No RR1147. 2018. www.hse.gov.uk/research/rrpdf/rr1147.pdf.
3 Hall S, Poller B, Bailey C, et al. Use of ultraviolet-fluorescence-based simulation in evaluation of personal protective equipment worn for first assessment and care of a patient with suspected high-consequence infectious disease. *J Hosp Infect* 2018;99:218-28. 10.1016/j.jhin.2018.01.002 29325871

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