Editorials

Was enough, and is enough, being done to protect the primary care workforce from COVID-19?

RISK OF COVID-19 AMONG HEALTHCARE WORKERS

There is clear evidence that healthcare workers (HCWs) are at increased risk of contracting COVID-19. Compared to nonessential workers, HCWs have a seven-fold increase in risk of severe COVID-19 (testing positive in hospital or death).1 Frontline, or patient-facing, HCWs have a three-fold increase in risk of testing positive for COVID-19 compared to the general population.² Compared to non-patient facing HCWs they have a three-fold risk, and their household members have a two-fold risk of hospital admission with COVID-19.3 COVID-19 risk is also specialty dependent: 'front-door' speciality HCWs (A&E, medical specialties including general, acute, and geriatric medicine, and infectious diseases) are at increased risk compared to intensive care HCWs,3 who in some studies had a lower risk than other HCWs.4

AVAILABILITY OF DATA

The only publicly available data on COVID-19related deaths of doctors in the UK comes from tributes in the medical press, which are likely to underestimate the number of deaths. These record that 16 GPs (out of 43 doctors) have died from COVID-19.5,6 The number of deaths of other primary care workforce members is unknown. There have been calls for better surveillance data on hospital-acquired COVID-19 deaths of healthcare workers;7 similar data are also required for the primary care workforce. We have argued for deaths of all workers who may have contracted COVID-19 during the course of their work to be referred to the Health and Safety Executive (HSE) under the Reporting of Injuries Diseases and Dangerous Occurrences Regulations,8 and the coroner, so they can be adequately investigated and lessons learnt.9 The extent to which this is happening is unknown. Data on other outcomes, such as prevalence of long COVID among the primary care workforce is also required.

"Compared to non-essential workers, healthcare workers have a seven-fold increase in risk of severe COVID-19 (testing positive in hospital or death).

PROTECTING HEALTHCARE WORKERS:

Lower risk of COVID-19 among intensive care workers may be due to higher levels of personal protective equipment (PPE), and better training and facilities for changing PPE than other staff.4,10 Opportunities were missed to protect the primary care workforce, with PPE shortages persisting for months. BMA surveys in April 2020 found over one-third of GPs did not have eye protection,11 in May, 69% of GPs had sourced their own PPE or relied on donations, 12 and in June ongoing problems with supply of masks to GPs were reported. 13 Furthermore, Public Health England (PHE) followed World Health Organization (WHO) guidance (designed for low- and middleincome countries) in recommending lower levels of PPE than HSE guidance, which existed prior to the pandemic.¹⁴ Arguments for higher levels of PPE are gaining ground. 15 Evidence of aerosol transmission of the SARS-CoV-2 virus has been emerging since Spring 2020.9,16 The BMA wrote to NHS Trusts on 7 January 2021 reminding them of their 'responsibility under HSE legislation to protect workers as fully as possible and to take all necessary steps to prevent future sickness and death; 17 and advocating wider use of FFP3 masks, goggles, and face shields due to the new and more transmissible strains of SARS-CoV-2. The BMA also wrote to PHE on 13 January 2021 requesting review of PPE recommendations to ensure staff, including those in general practice, are protected from aerosol transmission. 18 What happens as a result of these interventions remains to be seen.

"Arguments for higher levels of PPE are gaining ground. Evidence of aerosol transmission of the SARS-CoV-2 virus has been emerging since Spring 2020.'

PROTECTING HEALTHCARE WORKERS: VACCINATION

One month after vaccinations with the Pfizer/BioNTech vaccine commenced, NHS England wrote to Trusts and clinical commissioning groups requiring immediate vaccination of frontline staff, including primary care, to 'Protect the NHS'.1' However, HCWs' second vaccine doses have been delayed up to 12 weeks after the first dose. While there is good evidence for the Oxford/AstraZeneca vaccine, the Pfizer/ BioNTech vaccine dose delay is occurring despite Medicines and Healthcare products Regulatory Agency approval for, and WHO and Centers for Disease Control and Prevention advice to use the original dosing schedule.20

Failure to implement the vaccination programme as delivered in efficacy trials means the protection afforded to HCWs. and indeed the NHS, is unclear.

What is clear, is that a further opportunity to offer the best protection to the NHS workforce has been missed, despite the government's mantra to 'Protect the NHS'. These deficiencies and shortcomings in protecting the NHS workforce need to be rectified without further delay and will require scrutiny through an independent public inquiry.

Denise Kendrick,

GP; Professor of Primary Care Research, University of Nottingham, Nottingham.

Raymond M Agius,

Emeritus Professor of Occupational and Environmental Medicine, University of Manchester, Manchester.

John FR Robertson,

Consultant Surgeon, University Hospitals of Derby and Burton, NHS Foundation Trust; Professor of Surgery, University of Nottingham, Nottingham.

Herb F Sewell,

Emeritus Professor of Immunology and Honorary Consultant Immunologist, University of Nottingham,

"Failure to implement the vaccination programme [Pfizer/BioNTech vaccinations] as delivered in efficacy trials means the protection afforded to healthcare workers, and indeed the NHS, is unclear.

ADDRESS FOR CORRESPONDENCE

Denise Kendrick

Division of Primary Care, Floor 13, Tower Building, University Park, Nottingham NG7 2RD, UK.

Email: denise.kendrick@nottingham.ac.uk

Marcia Stewart.

Emeritus Principal Lecturer, De Montfort University, Leicester.

Provenance

Commissioned; externally peer reviewed.

Competing interests

The authors have declared no competing interests.

DOI: https://doi.org/10.3399/bjgp21X714953

REFERENCES

- Mutambudzi M, Niedzwiedz CL, Macdonald EB, et al. Occupation and risk of severe COVID-19: prospective cohort study of 120,075 UK Biobank participants. medRxiv 2020; DOI: 10.1101/2020.05.22.20109892.
- Nguyen LH, Drew DA, Graham MS, et al. Risk of COVID-19 among front-line healthcare workers and the general community: a prospective cohort study. Lancet Public Health 2020; 5(9): e475-e483.
- 3. Shah ASV, Wood R, Gribben C, et al. Risk of hospital admission with coronavirus disease 2019 in healthcare workers and their households: nationwide linkage cohort study. BMJ 2020; 371: m3582.
- Eyre DW, Lumley SF, O'Donnell D, et al. Differential occupational risks to healthcare workers from SARS-CoV-2 observed during a prospective observational study. ELife 2020; 9: e60675.
- A tribute: the GPs who have died from COVID-19. GPonline 2021; 4 Jan: https://www.gponline. com/tribute-gps-died-covid-19/article/1681086 (accessed 8 Feb 2021).
- 6. BMJ. Remembering the UK doctors who have died of covid-19. https://www.bmj.com/covidmemorial (accessed 8 Feb 2021).
- The DELVE Initiative. Scoping report on hospital and health care acquisition of COVID-19 and its control. 2020. https://rs-delve.github.io/ reports/2020/07/06/nosocomial-scoping-report. html (accessed 8 Feb 2021).
- Agius RM, Robertson JFR, Stewart M, et al. Covid-19: rigorous investigation of healthcare workers' deaths is indispensable. BMJ Opinion 2020; 12 May: https://blogs.bmj. com/bmj/2020/05/12/covid-19-rigorousinvestigation-of-healthcare-workers-deaths-isindispensable (accessed 8 Feb 2021).
- Robertson JFR, Stewart M, Kendrick D, Sewell HF. Covid-19: protect health and social care workers and refer their deaths to the coroner. BMJ Opinion 2020; 21 Apr: https://blogs.bmj. com/bmj/2020/04/21/covid-19-protect-healthand-social-care-workers-and-refer-their deaths-to-the-coroner (accessed 8 Feb 2021).
- 10. Karlsson U, Fraenkel C-J. Covid-19: risks to healthcare workers and their families. BMJ 2020; 371: m3944.
- 11. BMA Media Team. Doctors still without

- adequate supplies of PPE, major BMA survey finds. BMA 2020; 18 Apr: https://www.bma.org. uk/bma-media-centre/doctors-still-withoutadequate-supplies-of-ppe-major-bma-surveyfinds (accessed 8 Feb 2021).
- 12. BMA Media Team. BMA survey reveals almost half of doctors have relied upon donated or self-bought PPE and two thirds still don't feel fully protected. BMA 2020; 3 May: https://www. bma.org.uk/bma-media-centre/bma-surveyreveals-almost-half-of-doctors-have-reliedupon-donated-or-self-bought-ppe-and-twothirds-still-don-t-feel-fully-protected (accessed 8 Feb 2021).
- 13. Cooper K. PPE: a problem yet to be fixed. BMA 2020; 10 Jun: https://www.bma.org.uk/newsand-opinion/ppe-a-problem-yet-to-be-fixed (accessed 8 Feb 2021).
- 14. Health and Safety Executive. Respiratory protective equipment at work: a practical guide. 2013. https://www.hse.gov.uk/pubns/priced/ hsg53.pdf (accessed 8 Feb 2021).
- 15. Majeed A, Molokhia M, Pankhania B, Asanati K. Protecting the health of doctors during the COVID-19 pandemic. Br J Gen Pract 2020; DOI: https://doi.org/10.3399/bjgp20X709925.
- 16. Morawska L, Milton DK. It is time to address airborne transmission of coronavirus disease 2019 (COVID-19). Clin Infect Dis 2020; 71(9):
- 17. BMA. Urgent COVID-19 vaccination and protection to staff. 2021. https://www.bma. org.uk/media/3714/bma-letter-to-trust-ceosvaccination-january-2021.pdf (accessed 9 Feb 2021).
- 18. BMA. Re: enhanced PPE protection for healthcare staff. 2021. https://www.bma.org. uk/media/3659/bma-letter-to-phe-130121.pdf (accessed 9 Feb 2021).
- 19. NHS England, NHS Improvement. Operational guidance: vaccination of frontline health & social care workers. 2021. https://www.england. nhs.uk/coronavirus/publication/operationalguidance-vaccination-of-frontline-health-andsocial-care-workers (accessed 9 Feb 2021)
- 20. Robertson JFR, Sewell HF, Stewart M, et al. Covid-19 vaccines: to delay or not to delay second doses. BMJ Opinion 2021; 5 Jan: https://blogs.bmj.com/bmj/2021/01/05/covid-19-vaccines-to-delay-or-not-to-delay-seconddoses (accessed 8 Feb 2021).