Taking responsibility for front-line health-care workers





Inspiring stories about the bravery and resilience of health-care workers in the fight against COVID-19 are touted in news coverage around the world. However, little attention is paid to the factors that undermine global efforts to protect front-line health-care workers.

In The Lancet Public Health, Long H Nguyen and colleagues report findings of a study¹ in which demographic data, medical histories, and symptoms of COVID-19 were gathered from the general community and front-line health-care workers in the UK and the USA. This reporting was done via the COVID-19 Symptom Study smartphone application, its data used to compare the risk of COVID-19 between healthcare workers and the general community. Front-line health-care workers were at increased risk for reporting a positive COVID-19 test compared with the general community, after adjustment for the likelihood of receiving a COVID-19 test (adjusted hazard ratio [HR] 3.40, 95% CI 3.37–3.43). Health-care workers were additionally asked to report week-by-week availability of personal protective equipment (PPE) and the results of any COVID-19 tests they underwent. Although Nguyen and colleagues acknowledged the limitations of their study, the increased risk for COVID-19 identified among health-care workers who reported inadequate PPE (adjusted HR 1-31, 95% CI 1-10–1-56) is concerning.

The exact toll of COVID-19 on health-care workers can only be approximated. In May, 2020, Amnesty International reported that more than 3000 health-care workers have died from COVID-19 across 79 countries.² This number probably represents a fraction of the true global death toll of health-care workers because of factors including poor documentation of deaths in some countries (and scant recording of profession), inconsistent definitions of health-care worker across nations, and data obfuscation.²

As the largest sector of the health-care workforce, nurses face a disproportionate risk of COVID-19. According to estimates from the International Council of Nurses, more than 600 nurses have died from COVID-19 globally.² In May, 2020, the American Nurses Association surveyed 14 328 nurses to understand their experiences related to the availability of PPE.³ 45% of nurses reported PPE shortages, 79% were encouraged or required to reuse PPE, and 36% reported reusing N-95

masks for 5 days or longer.³ Of the 79 countries surveyed by Amnesty International,² PPE shortages were reported in 63 countries for front-line health-care workers such as nurses and, in at least 31 countries, shortages have escalated into strikes and protests by health-care workers seeking reasonable protection.

6 months into the COVID-19 pandemic, many governments around the world have not adequately improved health-care workers' access to PPE. Scant coordination at national and international levels has resulted in resource competition rather than cooperation, in addition to hoarding, price gouging, and unnecessary shortages in some nations, while other countries amass surpluses. This unstable market favours large purchasers and puts small companies and low-income countries at a disadvantage. Although some improvements have been made to major supply chains, facilities outside of large systems (eg, nursing homes) continue to face shortages.

How can governments protect front-line health-care workers? One immediate action that governments could take is to mandate universal masking. This step would help to both protect health-care workers (since studies have shown a reduction in COVID-19 cases among health-care workers after implementation of universal masking) and target the underlying reason for the myriad public health and economic challenges that countries are navigating.^{6,7}

Next, data transparency is essential. Many countries do not enforce methodical approaches to gathering key data such as patient and provider demographics, death toll, and PPE levels. The US Government, for instance, does not require that PPE manufacturers disclose their stockpile levels or shipping practices, limiting officials' ability to make informed policy decisions.⁸

Finally, national leaders must assume responsibility for front-line health-care workers' safety. Governments need to cooperate with other nations to ensure equitable distribution of PPE. Countries could create or bolster unified approaches to supply chain management, such as WHO's international portal for PPE orders.⁴

If we are ever to outpace COVID-19, there must be accountability at every level, from the community to top government officials. By combining a centralised

Published Online July 31, 2020 https://doi.org/10.1016/ 52468-2667(20)30179-1 See **Articles** page e475 mechanism for supply chain oversight, with universal masking and data transparency at local levels, it is possible to afford health-care workers the protection they deserve.

We declare no competing interests.

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- 1 Nguyen LH, Drew DA, Graham MS, et al. Risk of COVID-19 among front-line health-care workers and the general community: a prospective cohort study. Lancet Public Health 2020; published online July 31. https://doi.org/10.1016/S2468-2667(20)30164-X.
- 2 Amnesty International. Exposed, silenced, and attacked: failures to protect health and essential workers during the COVID-19 pandemic. London, UK: Amnesty International and Peter Benenson House, May, 2020.

- 3 American Nurses Association. Personal protective equipment survey. May, 2020. https://www.nursingworld.org/~49cd40/globalassets/ covid19/ppe-infographic-june-5-2020.pdf (accessed July 21, 2020).
- 4 Burki T. Global shortage of personal protective equipment. Lancet Infect Dis 2020; 20: 785–86.
- 5 Wan W. America is running short on masks, gowns, and gloves. Again. Washington Post. July 8, 2020. https://www.washingtonpost.com/health/2020/07/08/ppe-shortage-masks-gloves-gowns/ (accessed July 21, 2020).
- Seidelman J, Lewis S, Advani S, et al. Universal masking is an effective strategy to flatten the SARS-2-CoV healthcare worker epidemiologic curve. *Infect Control Hosp Epidemiol* 2020; published online June 25. https://doi.org/10.1017/ice.2020.313.
- 7 Wang X, Ferro EG, Zhou G, Hashimoto D, Bhatt DL. Association between universal masking in a health care system and SARS-CoV-2 positivity among health care workers. JAMA 2020; published online July 14. https://doi.org/10.1001/jama.2020.12897.
- 8 Dai T, Bai G, Anderson G. PPE supply chain needs data transparency and stress testing. *J Gen Intern Med* 2020; published online June 30. https://doi.org/10.1007/s11606-020-05987-9.