Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

to be left to uncoordinated separate studies by individual investigators or vaccine developers. South Africa, at the forefront of dealing with the challenge of its vaccine roll-out during the spread of a predominant 501Y.V2 variant, has to make vaccine decisions without adequate efficacy data. A correlate of protection for mild and severe SARS-CoV-2 infection will go a long way to providing an evidence base for these decisions and overcome the obstacles that new variants are placing on the vision of global SARS-CoV-2 control with the widespread implementation of effective immunisation.

SSAK is the co-chair of the South African Ministerial Advisory Committee for COVID-19.

Salim S Abdool Karim
salim.abdoolkarim@caprisa.org

Centre for the AIDS Programme of Research in South Africa, Durban 4013, South Africa; Department of Epidemiology, Columbia University, New York, USA

Published **Online** March 24, 2021 https://doi.org/10.1016/S0140-6736(21)00530-4

1 Polack FP, Thomas SJ, Kitchin N, et al. Safety and efficacy of the BNT162b2 mRNA COVID-19 vaccine. *N Eng J Med* 2020; **383:** 2603–15.
2 Baden LR, El Sahly HM, Essink B, et al. Efficacy and safety of the mRNA-1273 SARS-CoV-2 vaccine. *N Eng J Med* 2020; **384:** 403–16.
3 Wibmer CK, Ayres F, Hermanus T, et al. SARS-CoV-2 501Y.V2 escapes neutralization by South African COVID-19 donor plasma. *bioRxiv* 2021: published online Jan 19. https://doi.org/10.1101/2021.01.18.427166 (preprint).
4 Huang B, Dai L, Wang H, et al. Neutralization of SARS-CoV-2 VOC 501Y.V2 by human antisera elicited by both inactivated BBIBP-CorV and recombinant dimeric RBD ZF2001 vaccines. *bioRxiv* 2021: published online Feb 2. https://doi.org/10.1101/2021.02.01.429069 (preprint).
5 Wang Z, Schmidt F, Weisblum Y, et al. mRNA vaccine-elicited antibodies to SARS-CoV-2 and circulating variants. *Nature* 2021; published online Feb 10. https://doi.org/10.1038/s41586-021-03324-6.
6 Wu K, Werner AP, Moliva JI, et al. mRNA-1273 vaccine induces neutralizing antibodies against spike mutants from global SARS-CoV-2 variants. *bioRxiv* 2021: published online Jan 25. https://doi.org/10.1101/2021.01.25.427948 (preprint).
7 Madhi SA, Baillie V, Cutland CL, et al. Safety and efficacy of the ChAdOx1 nCoV-19 (AZD1222) COVID-19 vaccine against the B.1.351 variant in South Africa. *medRxiv* 2021: published online Feb 12. https://doi.org/10.1101/2021.02.10.21251247 (preprint).
8 Voysey M, Clemens SAC, Madhi SA, et al. Safety and efficacy of the ChAdOx1 nCoV-19 vaccine (AZD1222) against SARS-CoV-2: an interim analysis of four randomised controlled trials in Brazil, South Africa, and the UK. *Lancet* 2021; **397:** 99–111.
9 Novavax. Press release: Novavax COVID-19 vaccine demonstrates 89·3% efficacy in UK phase 3 trial. Jan 28, 2021. https://ir.novavax.com/news-releases/news-release-details/novavax-covid-19-vaccine-demonstrates-893-efficacy-uk-phase-3 (accessed Feb 9, 2021).
10 Johnson & Johnson. Johnson & Johnson announces single-shot Janssen COVID-19 vaccine candidate met primary endpoints in interim analysis of its phase 3 ENSEMBLE trial. Jan 29, 2021. https://www.jnj.com/johnson-and-johnson-announces-single-shot-janssen-covid-19-vaccine-candidate-met-primary-endpoints-in-interim-analysis-of-its-phase-3-ensemble-trial (accessed Feb 9, 2021).
11 Fontanet A, Autran B, Lina B, Kieny MP, Abdool Karim SS, Sridhar D. SARS-CoV-2 variants and ending the COVID-19 pandemic. *Lancet* 2021; **397:** 952–54.

For **UN sex-aggregated case data** see https://data.unwomen.org/resources/covid-19-emerging-gender-data-and-why-it-matters

For more on **gender and race on the front line** see https://www.genderandcovid-19.org/resources/covid-19-pandemic-and-health-professionals-gender-and-race-on-the-front-line/

Gender, race, and health workers in the COVID-19 pandemic

The Editors[1] correctly highlighted the situation the health workforce is in, and how it is facing "serious harms to their physical and mental wellbeing while trying to deliver quality care" during the COVID-19 pandemic. Considering the health workforce as a homogeneous group misses the reality of who is affected within this group and the necessary solutions.

70% of the global health workforce are women, a number that increases to 90% with social care workers. Sex-aggregated case data collated by the UN show that more than 70% of COVID-19 infections in health-care workers in the USA, Italy, and Spain are in women. In our work on health professionals' gender and race at the front line of the COVID-19 pandemic, we found that this rate is partly because of the absence of necessary resources provided to these health-care workers: women, and Black women in particular, have less access to personal protective equipment (PPE) and training. Female health-care workers worldwide are also facing the downstream effects of their work, including mental health issues,[2] increased physical violence, alternative arrangements for their families so as to not expose them to risk, and physical exhaustion.

Gender-neutral policy making inherently neglects the needs of women.[3] Thus, it is imperative to ensure that all considerations of health-care workers are disaggregated by gender and race to understand the differential effect between different members of the workforce. In doing so, targeted interventions can ensure that PPE is distributed fairly, that proper mental health programmes are created, and that these efforts are gender mainstreamed to ensure that they reach those most vulnerable to suffering these effects.

We declare no competing interests.

*Gabriela Lotta, *Michelle Fernandez, Denise Pimenta, Clare Wenham*
michelle.vfernandez@gmail.com

Fundação Getúlio Vargas, São Paulo, Brazil (GL); University of Brasília, Brasília 70904-970, Brazil (MF); Fundação Oswaldo Cruz, Belo Horizonte, Brazil (DP); London School of Economic and Political Science, London, UK (CW)

1 The Lancet. Health and care workers are owed a better future. *Lancet* 2021; **397:** 347.
2 Vizheh M, Qorbani M, Arzaghi SM, Muhidin S, Javanmard Z, Esmaeili M. The mental health of healthcare workers in the COVID-19 pandemic: a systematic review. *J Diabetes Metab Disord* 2020; **19:** 1–12.
3 Wenham C. Feminist global health security. Oxford: Oxford University Press, 2021.

Department of Error

Lokugamage AU, Wong SHM, Robinson NMA, Pathberiya SDC. Transformational learning to decolonise global health. Lancet *2021;* **397:** *968–69*—In this Correspondence, the published work the authors refer to in their first sentence has been corrected to a Comment. This correction has been made to the online version as of April 1, 2021.