



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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Africa faces difficult choices in responding to COVID-19

Coronavirus disease 2019 (COVID-19) is now established in Africa, with more than 63 000 cases and 2200 deaths in 53 countries, as of May 11, 2020.¹ Fragile health systems leave African countries vulnerable to the anticipated surge in severely ill patients with COVID-19, despite much younger populations.

To flatten the curve, some African governments have imposed stringent public health measures (lockdown) based on physical distancing to reduce transmission. However, the safety of this approach in poor communities has not been evaluated, and it is plausible that lives lost to lockdown could exceed those saved from COVID-19. Potentially fatal unintended consequences include widespread economic disruption and hunger, worsening food insecurity if harvesting is disrupted, and increased domestic and state actor violence. Large numbers of African patients with HIV and tuberculosis depend on functional health services, with substantial individual and public health consequences if treatment access is disrupted.² Although anticipated by national programmes, some treatment interruptions are inevitable during prolonged lockdown.

With clear understanding of risk, governments can make informed decisions about harms and benefits. We used Spiegelhalter's approach to compare age-group specific infection fatality ratios from COVID-19 to background (non-COVID-19) mortality risk in Malawi, South Africa, the UK, and India.³⁻⁵ This assumes COVID-19 infection fatality ratios similar to China, but true age-specific case-fatality rates might be higher with fragile health systems. For context, Malawi has not yet triggered lockdown, whereas the UK, South Africa, and India have. We estimate that in the UK, having COVID-19 confers risk of death equivalent to approximately

12 months of background mortality risk, averaged across all age groups. By contrast, in Malawi this risk is equivalent to 4 months of background mortality (appendix). This reflects higher background mortality rates in Malawi, underscoring the fragility of health under normal circumstances.

Malawi (median age 17 years) also has relatively few older citizens, with 6.6% of the population older than 60 years. This makes alternative strategies potentially safer and more feasible than lockdown—eg, community-led approaches to support older people to self-isolate with provision of food, medicine, and wellbeing support.⁶

Although we fully agree that macroeconomic arguments against lockdown cannot justify widespread loss of life in Europe and Asia, the considerations are very different in Africa, where lockdown could cost many lives. We urge African governments to carefully contextualise safe physical distancing policies that maximise likely benefits. Without a context-specific, ethical approach to physical distancing, unintended harms from stringent lockdown could pose more harm than the direct effects of COVID-19 itself.

We declare no competing interests.

*Titus Divala, *Rachael M Burke, Latif Ndeketa, Elizabeth L Corbett, Peter MacPherson*
rachael.burke@lshhtm.ac.uk

University of Malawi College of Medicine, Blantyre, Malawi (TD); Malawi Liverpool Wellcome Trust Clinical Research Programme, Liverpool School of Tropical Medicine, Liverpool L3 5QA, UK (TD, RMB, LN, ELC, PM); and Faculty of Infectious and Tropical Disease, London School of Hygiene & Tropical Medicine, London, UK (RMB, ELC)

- 1 WHO Regional Office for Africa. COVID-19 Africa numbers. May 7, 2020. www.afro.who.int/health-topics/coronavirus-covid-19 (accessed May 7, 2020).
- 2 Pai M. AIDS, TB and malaria: coronavirus threatens the endgame. March 29, 2020. <https://www.forbes.com/sites/madhukarpai/2020/03/29/aids-tb-and-malaria-coronavirus-threatens-the-endgame/#24e4c72a5afd> (accessed April 1, 2020).
- 3 Spiegelhalter D. How much 'normal' risk does COVID represent? March 21, 2020. <https://medium.com/wintoncentre/how-much-normal-risk-does-covid-represent-4539118e1196> (accessed April 1, 2020).

- 4 Verity R, Okell LC, Dorigatti I, et al. Estimates of the severity of coronavirus disease 2019: a model-based analysis. *Lancet Infect Dis* 2020; published online March 30. [https://doi.org/10.1016/S1473-3099\(20\)30243-7](https://doi.org/10.1016/S1473-3099(20)30243-7).
- 5 Ferguson N, Laydon D, Nedjati-Gilani G, et al. Report 9: impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand. March 16, 2020. <https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf> (accessed April 1, 2020).
- 6 Dahab M, van Zandvoort K, Flasche S, et al. COVID-19 control in low-income settings and displaced populations: what can realistically be done? March 20, 2020. <https://www.lshhtm.ac.uk/newsevents/news/2020/covid-19-control-low-income-settings-and-displaced-populations-what-can> (accessed April 1, 2020).



Published Online
May 12, 2020
[https://doi.org/10.1016/S0140-6736\(20\)31056-4](https://doi.org/10.1016/S0140-6736(20)31056-4)
See Online for appendix

Where are the ECDC and the EU-wide responses in the COVID-19 pandemic?



Published Online
May 13, 2020
[https://doi.org/10.1016/S0140-6736\(20\)31132-6](https://doi.org/10.1016/S0140-6736(20)31132-6)

As the EU continues to face the COVID-19 pandemic, an unprecedented transboundary crisis, its member states resort to measures within the boundaries of the nation state. This situation questions the capacity of the EU to deploy public health instruments to cope with pandemics. One such instrument, the European Centre for Disease Control (ECDC), seems to show a discreet involvement in this crisis, suggesting emerging isolationist behaviours of the member states.

The ECDC was established in 2004 with a mandate that aimed to "identify, assess and communicate current and emerging threats to human health from communicable diseases".¹ However, such a mandate was not complemented with enough resources to help the ECDC become a European knowledge hub in communicable diseases. To put this into perspective, the US Centers for Disease Control and Prevention (CDC) have legal powers and cover a greater range of public health areas through bodies such as the National Institute for Occupational Safety and Health or the National Center for Health Statistics. The CDC also has a much larger budget than the ECDC (approximately US\$8 billion for 2020,²