Title: **Africa faces difficult choices in responding to COVID-19**

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COVID-19 is now established in Africa, with 6135 cases and 221 deaths in 49 countries to date. Fragile health systems leave African countries vulnerable to the anticipated surge in severely ill COVID-19 patients, despite much younger populations.

To “flatten the curve”, 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 HIV and TB patients depend on functional health services, with substantial individual and public health consequences if treatment access is disrupted.[[1]](#endnote-1) 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 (IFR) from COVID-19 to background (non-COVID) mortality risk in Malawi, South Africa, UK and India.[[2]](#endnote-2) [[3]](#endnote-3) [[4]](#endnote-4) This assumes COVID-19 IFRs similar to China; true age-specific case-fatality rates may be higher with fragile health systems. For context, Malawi has not yet triggered lockdown, whereas UK, South Africa and India have. We estimate that while in the UK being infected with COVID19 confers risk of death equivalent to approximately 12 months background mortality risk at any given age, in Malawi this risk is equivalent to four months of background mortality. 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% over 60. This makes alternative strategies potentially safer and more feasible than lockdown, for instance community-led approaches to support older people to self-isolate with provision of food, medicine and wellbeing support. [[5]](#endnote-5)

While 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 may itself cost many lives. We urge African governments to carefully contextualise safe physical distancing policies in order to maximise likely benefits. Without a context specific, ethical approach to physical distancing, unintended harms from stringent lockdown may pose more harm than the direct effects of COVID-19 itself.

1. #  Pai, M. “AIDS, TB And Malaria: Coronavirus Threatens The Endgame” <https://www.forbes.com/sites/madhukarpai/2020/03/29/aids-tb-and-malaria-coronavirus-threatens-the-endgame/#24e4c72a5afd> [accessed 1 April 2020].

 [↑](#endnote-ref-1)
2. Spiegelhalter, D. “How much ‘normal’ risk does COVID represent?” <https://medium.com/wintoncentre/how-much-normal-risk-does-covid-represent-4539118e1196> [accessed 1 April 2020]. [↑](#endnote-ref-2)
3. Verity, R. *et al.* Estimates of the severity of coronavirus disease 2019: a model-based analysis. *The Lancet Infectious Diseases* **0**, (2020). [↑](#endnote-ref-3)
4. Ferguson, N *et al*. “Report 9: Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand” Available at <https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf> [accessed 1 April 2020] [↑](#endnote-ref-4)
5. #  Dahab, M *et al. “*COVID-19 control in low-income settings and displaced populations: what can realistically be done?” <https://www.lshtm.ac.uk/newsevents/news/2020/covid-19-control-low-income-settings-and-displaced-populations-what-can> [accessed 1 April 2020]

 [↑](#endnote-ref-5)