Evidence informing the UK's COVID-19 public health response must be transparent

The government asserts that its response to the COVID-19 pandemic is based on evidence and expert modelling. However different scientists can reach different conclusions based on the same evidence, and small differences in assumptions can lead to large differences in model predictions.

Our countr to COVID-19 is demonstrably different from how most other countries are responding globally, including elsewhere in Europe. As the government has stressed, it is imperative to delay and 'flatten' the epidemic curve to ensure the NHS can cope.(1) This is particularly essential for the UK, which only has 2.5 hospital beds per 1,000 population--behind Italy (3.2), France (6.0) and Germany (8.0).(2) Initial data from Italy have shown that 9-11% of actively infected patients with Covid-19 required intensive care during the first 10 days of March.(3)

It is not clear how the UK's unique response is informed by the experiences of other countries, particularly those that have achieved relative control over the virus as a result of widespread testing, contact tracing and state-imposed social distancing measures, such as Singapore, Hong Kong, Taiwan and South Korea.(4) The World Health Organization's report of its WHO-China Joint Mission on Coronavirus Disease demonstrates very clearly that only immediate and decisive public health responses worked to prevent or delay hundreds of thousands of cases in China, and have advised that it is vital to tackle the virus at the early stages with social distancing.(5)

We welcome the government's announcement that the modelling and data considered by its Scientific Advisory Group for Emergencies (SAGE) will be published in the future.(1) However, we request that the UK government urgently and openly shares the scientific evidence, data and models it is using to inform current decision-making related to COVID-19 public health interventions within the next 72 hours and then at regular intervals thereafter. Time is a luxury we simply do not have as we face this critical public health crisis. As we have already seen in other countries, a matter of a few days can prove critical in terms of saving lives and avoiding health system collapse.

As the UK was not the first country to face a COVID-19 outbreak, knowledge of the disease and evidence pertaining to effective public health interventions is increasingly available. However, this is only advantageous if we incorporate the best available evidence from observations elsewhere, and use the time this affords us to refine a comprehensive response based on input and scrutiny from a broad base of scientific experts.

With the UK increasingly becoming an outlier globally in terms of its minimal social distancing and other population-level interventions, transparency is key to retaining the understanding, cooperation and trust of the scientific and healthcare communities as well as the general public, ultimately leading to a reduction in morbidity and mortality.

Signatories

Nisreen A Alwan, Associate Professor in Public Health, University of Southampton Raj Bhopal, Emeritus Professor of Public Health, Usher Institute, University of Edinburgh Rochelle A. Burgess, Deputy Director, UCL Centre for Global Non-Communicable Diseases; Lecturer in Global Health, UCL Institute for Global Health

Tim Colburn, Associate Professor of Global Health Epidemiology and Evaluation, UCL Institute for Global Health

Anthony Costello, Professor of Global Health and Sustainable Development, UCL Luis E Cuevas, Professor of International Health and Epidemiology, Liverpool School of Tropical Medicine

Matthias Egger, Professor of Epidemiology and Public Health, University of Bristol Sandra Eldridge, Professor of Biostatistics, Institute of Population Health Sciences, Queen Mary University of London

Paul Fine, Professor of Communicable Disease Epidemiology, LSHTM

Valentina Gallo, Honorary Associate Professor in Epidemiology, LSHTM

Mark S Gilthorpe, Professor of Statistical Epidemiology, University of Leeds

Trish Greenhalgh, Professor of Primary Care Health Sciences, University of Oxford

Christopher Griffiths, Professor of Primary Care and Acting Director of the Institute of

Population Health Sciences, Queen Mary University of London

Paul R Hunter, Professor in Medicine, University of East Anglia

Shabbar Jaffar, Head of Department of International Public Health, Chair of Epidemiology, LSHTM

Ruth Jepson, Professor of Public Health in Social Science, University of Edinburgh

Andrew Lee, Reader in Global Public Health, University of Sheffield

Nicola Low, Professor of Epidemiology and Public Health, University of Bern

Adrian Martineau, Professor of Respiratory Infection and Immunity, Institute of Population Health Sciences, Queen Mary University of London

David McCoy, Professor of Global Public Health, Queen Mary University London

Borislava Mihaylova, Professor of Health Economics, Institute of Population Health

Sciences, Queen Mary University of London

Miriam Orcutt, Senior Research Fellow, UCL Institute for Global Health

Bharat Pankhania, Senior Clinical Lecturer, University of Exeter

Hynek Pikhart, Professor of Epidemiology and Medical Statistics, UCL

Paul Pilkington, Associate Professor of Public Health, University of the West of England Bristol

Allyson Pollock, Professor of Public Health, Newcastle University

Gabriel Scally, Honorary Professor of Public Health, University of Bristol

Nicola Shelton, Professor of Population Health, UCL

George Davey Smith, Professor of Clinical Epidemiology, University of Bristol

James Smith, Honorary Research Fellow, London School of Hygiene & Tropical Medicine

Devi Sridhar, Professor of Global Public Health, University of Edinburgh

Andrew Tatem, Professor of Spatial Demography and Epidemiology, University of Southampton

Stephanie Taylor, Professor in Public Health and Primary Care, Queen Mary University of London

Peter WG Tennant, University Academic Fellow in Health Data Science, University of Leeds Yrene Themistocleous, Clinical Research Fellow, University of Oxford Anne Wilson, Lecturer in Epidemiology, Liverpool School of Tropical Medicine

References

- UK Government (2020), Press release update from SAGE: delay phase modelling. https://www.gov.uk/government/news/update-from-sage-delay-phase-modelling [Accessed 15th March 2020]
- 2. OECD (2018), Hospital beds. https://data.oecd.org/healtheqt/hospital-beds.htm [Accessed 15 March 2020]
- **3.** Remuzzi A, Remuzzi G. (2020), COVID-19 and Italy: what next? The Lancet. DOI: 10.1016/S0140-6736(20)30627-9
- **4.** Anderson RM, Heesterbeek H, Klinkenberg D, Hollingsworth TD (2020), How will country-based mitigation efforts influence the course of the COVID-19 epidemic? The Lancet. DOI: 10.1016/S0140-6736(20)30567-5
- 5. WHO (2020), Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf [Accessed 15 March 2020]