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See **Online** for appendix

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

The UK Government asserts that its response to the coronavirus disease 2019 (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 country's response 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 National Health Service can cope.[1] This is particularly essential for the UK, which only has 2·5 hospital beds per 1000 population, fewer than in Italy (3·2 per 1000), France (6·0), and Germany (8·0). 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, 2020.[2]

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.[3] The WHO-China Joint Mission on Coronavirus Disease[4] shows very clearly that only immediate and decisive public health responses worked to prevent or delay hundreds of thousands of cases in China, and WHO has advised that it is vital to tackle the virus at the early stages with social distancing.[4]

We welcome the UK Government's announcement that the modelling and data considered by its Scientific Advisory Group for Emergencies will be published in the future.[1] However, we request that the 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 h 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 population-level interventions, transparency is key to retaining the understanding, cooperation and trust of the scientific and health-care communities as well as the general public, ultimately leading to a reduction of morbidity and mortality.

We declare no competing interests.

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COVID-19 cacophony: is there any orchestra conductor?

The first wave of coronavirus disease 2019 (COVID-19) pandemic is currently invading the world, and several countries are now struggling to fight it or trying to delay its start to help smooth its peak size for the purpose of lowering morbidity and mortality, and thereby reduce the overall tension on their health-care system. China's first major outbreaks of COVID-19 happened in January, 2020. Then South Korea, Iran, and Italy entered into this Ravel's Bolero-like epidemic in late February and early March, 2020, and many other countries are preparing to play the same rhythmic pattern in the coming days and weeks.

All countries have to react and take action without any conducting from WHO. WHO's Director-General declared on Jan, 30, 2020, a Public Health Emergency of International Concern,[1] which allowed him to release subsequent recommendations, but none were issued with regard to what to do, and when to do it, at the country level. With no vaccine or antivirals, the portfolio of countermeasures against COVID-19 is limited. Only a small set of evidence-based non-pharmaceutical interventions are available.[2–6]

Measures like self-quarantine, or temperature control at borders, are not expected to be very effective since half of infections are asymptomatic. There is consensus today to propose school closure, restrict social gathering (including shutdown of workplaces), limit population movements, and introduce so-called cordons sanitaires, which means quarantines at the scale of cities or regions. There is less consensus about which measure should start first, in which combination, and when.

There is no direct scientific evidence regarding wearing protective masks in public spaces for asymptomatic people, but mask protection is heavily practised in Asian populations and seems deeply despised in Western cultures. There is no common policy about which measures should be considered, and at which epidemiological threshold such measures should be implemented. Nobody knows at which level restrictions on mass gathering should be imposed.

The recent Chinese experience of combining non-pharmaceutical interventions to curb outbreak trends seems rather convincing. Although starting late in the process, authoritarian Chinese authorities succeeded in combining forced isolation of the population with all available social distancing interventions. The democratic Italian Government, followed by the governments of France, Spain, and other countries, set up most of these measures quickly in the epidemic process but lacked any international guidance or recommendations. Would they not have expected to see WHO headquarters as the orchestra conductor at this stage of the process? Do Member States not need some level of harmonisation and coordination when implementing the four available non-pharmaceutical interventions to help them decide whether, when, and how to implement them; if, when, and how to combine them; and to what extent? In addition, the Chinese Government has no guidance nor recommendation about lifting measures that have been in place in Wuhan since Jan 23, 2020. To what extent, at which pace, and how should they start lifting their intervention and allow people to resume normal social and economic life?

WHO remains surprisingly silent and absent in all of these pragmatic questions.

I declare no competing interests.

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Future of Chernobyl research: the urgency for consolidated action

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The Chernobyl nuclear disaster on April 26, 1986, continues to create fears and myths about its health consequences, as shown by the large response to a top-rated HBO miniseries devoted to the tragic event. Risk assessments range from recognising an increase in thyroid