

On 23 January, the central government of China imposed a lockdown in Wuhan and other cities in Hubei province that affected 57 million people. Even with these measures, the coronavirus started spreading to other countries – Singapore, Hong Kong, South Korea and beyond. However, something unexpected happened and the exponential rise in these countries started to flatten. As I write, China has managed to keep its confirmed cases under 90,000 with daily new cases coming down.

The Chinese response also had the consequence of buying other countries time. The UK has now had eight weeks to track the outbreak, and to learn about the virus. What we can now say for certain is that the UK has decided to chart its own course. Unfortunately, no certainty can attach to the wisdom of this – indeed, one needs to ask whether the UK approach is akin to gambling with the health of the population.

We know that the virus spreads through droplets expressed through coughs and sneezes, and through hands. We know that symptoms start with a high fever, followed by a dry cough and a few days later some individuals start having breathing difficulties and require hospital treatment or even intensive care.

We know that mortality rates rise with patients' age and pre-existing conditions such as cardiovascular disease, hypertension and diabetes, and that children have been largely spared the severe symptoms. We know that this is not like seasonal flu (with a death rate of 0.1%), but that Covid-19 results in around 5-10% of confirmed cases requiring intensive care and a death rate estimated at up to 2-3%.

In terms of response, other countries have provided good examples of how to effectively manage the outbreak. We do not yet have a vaccine and potential antiviral treatments are still in clinical trial but we have other effective, non-pharmacological interventions.

From South Korea, we have learnt that basic public health measures, such as extensive testing, can help measure the size of the problem, establish where the confirmed cases are, how transmission chains are occurring and, therefore, how to break them. From Singapore and China, we have learnt that contact tracing is essential, whether in the household, or within the community. This helps us to understand who could have been exposed and ensure that all are informed so that they immediately self-isolate.

From Taiwan and China, we learnt that early social distancing measures, such as banning large gatherings, restricting movement, working from home and essentially “shutting down” society for a time can reduce transmission and buy time for health services to ensure capacity is there for those needing medical support.

From Hong Kong, we have learnt the importance of individual behavioural change through extensive hand and environmental hygiene, restricting movement and crowds, 14-day quarantines for those arriving from mainland China and widespread awareness of key information. And we wait to see whether the Italian approach of large-scale social distancing will pay off.

All these strategies follow the World Health Organization's (WHO) advice that outbreaks can be contained, or at least significantly delayed, through testing, contact tracing and social distancing. Health services can use that time to prepare frontline staff, ensure adequate provision of beds, ventilators and oxygen, and provide quarantine facilities.

The UK has decided to accept the virus is unstoppable and that it will probably become an annual, seasonal infection

However, rather than learning from other countries and following the WHO advice, which comes from experts with decades of experience in tackling outbreaks across the world, the UK has decided to follow its own path. This seems to accept that the virus is unstoppable and will probably become an annual, seasonal infection.

The plan, as explained by the chief science adviser, is to work towards “herd immunity”, which is to have the

majority of the population contract the virus, develop antibodies and then become immune to it. This theory has been widely used to advocate for mass vaccination for measles, mumps and rubella. The thinking is that, if most of the population is vaccinated, a small percentage can go unvaccinated without cases emerging.

Given that a vaccine is at least a year off, working towards creating immunity within the UK population would ideally prevent widespread transmission and ideally prevent bad health outcomes for those most vulnerable, such as elderly people and those with pre-existing conditions. "Ideally" is the key word here: these plans are all based on modelling, and while modelling is a useful tool, it can often get its calculations wrong – as in China where 100,000 cases a day were predicted. The effectiveness of social distancing undercut this figure.

However, the UK's belief that this is the way forward means that other measures, such as banning large gatherings and cancelling non-essential travel, have been ignored – although the government appeared to change tack on Friday on mass events. It also means that testing for those with minor symptoms and the linked contact tracing will no longer occur.

This is worrying and possibly reckless. It is impossible to keep separate the 80% who would largely be fine after contracting the virus from the 20% who would suffer severely. Especially if there is no testing taking place, we will not know exactly who has had the virus and when, and we still don't know yet whether individuals can be re-infected once they have recovered.

While this plan might work in an ideal, predictable world, or in a computer simulation, we don't live in a computer simulation.

The UK approach risks losing touch with the complex reality of how public health systems, governance and people actually respond. I hope I'm wrong but if this plan doesn't work the cost will be lost time, an overburdened NHS and unnecessary deaths.

Copyright © 2020 Guardian News and Media Limited. All rights reserved.