

What went wrong (and what went right)?

By David Hearne, researcher, Centre for Brexit Studies.

For those of us living in the “West”, the pandemic has been the most significant (cataclysmic) event since the Second World War. Few remain alive today who would remember that (even the oldest 80-year olds would have been barely 5 when the war ended and the youngest soldiers are now well into their 90s).

So, at this juncture, it is worth looking back at what went wrong and what has gone well in order that we might learn from it. It is interesting that the responses in Europe and the USA and East Asia were very different.

East Asia (including, but not limited to China, where the first cases of COVID-19 were detected) acted early and aggressively to stem cases. Perhaps stemming from their experiences in dealing with the SARS (which had a significantly higher case fatality ratio than COVID-19) outbreak in the early 2000s, the pandemic was largely contained in many East Asian countries (and later in Oceania).

The strategies adopted differed significantly, although all reflected distinct local circumstances. The example of China is particularly salutary: in spite of initial tardiness and an attempt to cover up the disease, once the gravity of the situation became apparent, the Chinese state acted decisively (and ruthlessly) to suppress the illness.

This action was, ultimately, successful. In contrast, Europe and the Americas have had a “bad pandemic” in many ways. In the early period, this was understandable: this is a novel pathogen and understanding was quite limited.

However, there are fewer excuses more recently. There was a clear opportunity over the summer to drive the prevalence of the disease across Europe down to extremely low levels. We failed to take it.

This is not a UK-specific failing – the same actions were taken across Europe. Indeed, the freedom of travel within the continent probably exacerbated this. No individual is to blame for any of this: it’s eminently reasonable to do things that you are told are safe. I would.

The risk to any individual is low – if you have, say, a less than 1% chance of being infected and, if you’re young and reasonably healthy, your chances of serious complications even if you do get infected are likewise 1% or less. The risk of a bad outcome is therefore (probably significantly) less than 1-in-10,000.

On a personal level, that’s an eminently reasonable risk to take. However, if a million people decide to travel then the impact on disease prevalence in society as a whole is quite significant.

We compounded our mistakes in September and October after it became clear that cases were spiking – hardly a surprise once education was allowed to resume. A 2-week “circuit breaker” lockdown was fiercely resisted. Yet the costs of a 2-week shutdown are very modest: the economic and social costs of lockdown do not scale linearly with time (4 weeks is more than twice-as-bad as 2 weeks).

On the other side of the coin, we have made mistakes in implementing lockdowns. It is easy to lose sight of just how much of very fundamental freedoms we have lost. The right to leave one’s home and see family is quite fundamental. So is the right to education. Too often we appear to adopt an all-or-nothing approach.

Given the abundant evidence that outdoor transmission risks are low unless in close proximity or an extremely crowded environment, restrictions on this have been excessive. The risks of driving to a beauty spot and enjoying a picnic away well away from others are infinitesimal. To criminalise such activity seems an extreme and pointless restriction on basic liberties.

Similarly, it is hard to justify some of the restrictions on the right to be around loved ones in hospital (for example during labour). Education, too, has not been given the priority it should have. It is very hard to justify opening vast swathes of non-essential activities when some educational activities remain highly restricted. Moreover, had the November partial lockdown been extended through December (given that non-essential retail and hospitality was closed for over 3 months from January anyway), we might have greatly reduced the length of time that in-person educational settings have remained closed.

So, what went right? Well, the scientific community – and its backers in both the state and private sectors – have been devastatingly successful. The virus was sequenced and highly effective vaccines were developed in record time. Treatments are gradually becoming available.

From a standing start, we've created an astonishing architecture to test for the disease. The UK was a laggard in this respect, which contributed to our failure to identify the disease as it was spreading in the community during the "first wave". Today, the capacity exists to test hundreds of thousands of people every day (excluding so-called "lateral flow" tests). Regardless of the politics, that's a remarkable achievement.

Similarly, the mass-production of vaccines is being scaled up in an extraordinary manner: over one billion doses have already been produced and the number is now increasing very rapidly. More locally, it is clear that vaccine procurement has been a success in the UK and the logistical arrangements associated with vaccinating vast numbers have been impressive.

A small number of countries – including the UK and Denmark – have also been very successful in tracking genetic changes in the virus. These have grown in prominence as new variants have emerged that are highly transmissible and are beginning to evade immune response.

Unfortunately, it appears probable that we are making many of our earlier mistakes a second time around. In particular, several variants of the SARS-CoV2 virus have emerged which are able to partially evade immune responses (whether through prior infection or from vaccination).

This does not mean that vaccines will be ineffective. It is hoped that they will substantially attenuate disease severity in those affected. However, a simple example demonstrates the challenge for society at large.

Imagine a population that has never been exposed to the virus with a lifestyle akin to that we enjoyed during February 2020. At the time it was estimated that each individual would infect around 3 other people. However, since then new variants have become prevalent that are more infectious, so let us round that number up to 5.

Now, if 4% of all those infected require some kind of hospital treatment – probably a conservative number – it's easy to see how the health service would be overwhelmed. In a population the size of the UK that would mean almost 2.7 million people needing hospital care.

A vaccine that prevents over 95% of hospitalisations (for example) would substantially ease the pressure on the health service, reducing the total number of admissions to about 135,000. For context, the NHS has treated over 460,000 people for COVID-19 so far during the pandemic.

A vaccine that did this and also reduced infections by over 80% – as the most effective seem to – would stop the pandemic in its tracks. Indeed, even a vaccine that “only” reduced infections by 70% would, in conjunction with relatively minor social distancing measures (widespread mask wearing, a modicum of working-from-home for those who can, reduced public transport use etc.), would probably still manage to stop the disease.

A variant that meant that vaccines were “only” effective against severe disease would lose this. Indeed, if our 95% effectiveness at reducing severe disease were to fall to ~80% then the number at risk of hospitalisation would approach 500,000. We cannot afford another 2020.