Vaccine Nationalism

By David Hearne, researcher, Centre for Brexit Studies

We are currently in the midst of a rather ugly spat over access to vaccines for the novel coronavirus. Unsurprisingly, this has been blown up and escalated into something of a war of words.

In the UK, this has been exaggerated and distorted by a largely Eurosceptic press into a Brexit-related issue. However, whilst Brexit is a tangential factor, it is not central. Similarly, misinformation abounds online, propagated largely either by those with an agenda or others who are spoiling for a fight.

Firstly, let us consider the background: pre-pandemic, vaccines were something of a poor relation compared to many therapeutics. In wealthy countries, vaccines were routine medicines needed in modest quantities. Most of us received vaccines against several deadly diseases during early childhood. Very occasionally, boosters or specific vaccines are desirable for certain purposes (e.g. for certain international travel). In fact, proof of vaccination against Yellow Fever is a prerequisite to enter certain countries.

The major exception to this is against flu, where many of us receive vaccination on an annual basis. Again, however, the processes around this are well-established, demand is stable and the technology is mature. As a result, domestic promotion of vaccine manufacture (on-shoring) has not been a priority for most wealthy countries over the years. Similarly, the amount of money committed to vaccine research pre-2020 stands in marked contrast to the huge money spent on research into therapies to treat cancer.

The fact that so much global vaccine manufacture is concentrated in India tells a great deal about the economics of it (although this is not to understate either the business acumen or global importance of work done by Indian companies, particularly the Serum Institute of India). This is the background against which the remarkable achievements of scientists and engineers in terms of developing and manufacturing vaccines multiple vaccines against a novel illness must be seen.

As such, supply for new vaccines has had to be developed in record time. Nor are these trivial things to scale up in a short period. In other words, there are good technical reasons why supply is limited (otherwise we'd all be vaccinated by now!).

However, at the time of writing, most EU nations have delivered substantially fewer vaccinations per capita than some other wealthy countries, including Israel, the US and the UK. This is, understandably, causing some consternation and it's worth considering the reasons why.

The EU Commission has been engaged in a very public dispute with AstraZeneca over vaccine supply. Let us be honest: whatever the rights and wrongs of the case (and I have much sympathy with EU citizens and others who are desperately awaiting a vaccine) this is a distraction from the wider issue.

Specifically, the UK placed firm orders for 100m doses of the vaccine manufactured by AstraZeneca. The EU placed firm orders for 300m doses. Due to the complexities of manufacture, AstraZeneca has been able to deliver fewer doses than promised. Nobody is suggesting that this is anything other than an unfortunate result of manufacturing difficulties.

There is some confusion over the exact amount set to be delivered to the EU by the end of the first quarter. However, we know that 17m AstraZeneca doses have been distributed to EU member states as of 25th March (1). We don't have equivalent figures for the UK, but some guesswork will suffice.

The UK has allegedly received 13m doses of the vaccine manufactured by Pfizer and has administered around 31m doses in total (2) implying that the UK has received around 18m doses. The EU's suggestion is that AstraZeneca should have shared the shortcomings in proportion to the contracts, which seems a reasonable approach. Had that happened, the EU would have received an extra 9m doses and the UK 9m fewer.

The extra 9m doses would be sufficient to give an extra 2 doses per 100 people – moving the EU from 14 to 16 doses administered per 100 people. Hardly earth-shattering. For the UK, the figure would fall

from 45.9 to 32.3. A more significant setback but it would still leave the UK having administered double the rate of the EU.

In fact, the situation is even more bizarre, because there are some 7m doses of the AstraZeneca-manufactured vaccine waiting to be administered in the EU – 40% of the total deliveries. Given this bottleneck it is far from clear that an extra 9m doses would help. In other words, the disagreement with AstraZeneca can only explain a small part of the EU's issues with regard to vaccines. Several factors appear to have contributed to the UK's faster rollout relative to its EU neighbours.

Firstly, the Medicines and Healthcare products Regulatory Authority (MHRA) was very quick to grant approval to vaccines, allowing the UK to get its vaccination campaign underway early. This was not (explicitly) due to Brexit: emergency use authorisation was granted when the UK was still in the Single Market. However, EU members waited for the EMA to authorise (using a slower conditional marketing authorisation). To reiterate, this was a decision on the part of medical regulators and not the government. The MHRA appears to have consistently taken a pragmatic approach. The benefits of speedy approval clearly outweighed the (minimal) risks, particularly given the wave of illness engulfing the UK at the time.

Similarly, extending the gap between doses was a calculated risk – the evidence was strongly suggestive of the first dose giving substantial initial protection and, in the case of the AstraZeneca vaccine there were hints (later confirmed) that a 12 week gap might prove more effective than a 4 week one.

In a normal situation, extreme caution with vaccines is warranted: you are giving medicines to otherwise healthy individuals. It makes sense to await voluminous data and suspend inoculations at the merest hint of any issues – no matter how unlikely. The cost of doing so is typically low. However, we are not in a normal situation. Thousands are dying daily.

We've seen this again with national medical regulators, particularly with respect to the AstraZeneca vaccine. The costs of pausing vaccinations, awaiting even more data (whether on the elderly, blood clots etc.) in order to triple check things are astronomical. Worse,

doing so appears to be undermining trust in a vaccine that is both safe and effective.

The other major factor slowing the EU's rollout of vaccinations is procurement. Specifically, the UK waived manufacturer liability for vaccines, instantly making it more attractive. The EU also typically came to agreements later, paid a lower price and invested significantly less (on a per capita basis) than either the UK or US.

I have no doubt that the Commission were diligent in ensuring that all correct procedures were followed and that the EU got value for money. Unfortunately, on this occasion, that approach did not work.

Addendum

So how concerned should Britons be over threats to block vaccines? The UK has already given a first dose to those most at risk and has enough manufacturing capacity to give second doses of the AstraZeneca vaccine. The big challenge relates to the Pfizer-manufactured vaccine – millions are currently awaiting a second dose. Ultimately, I think we can be fairly sanguine. The UK can, at this juncture, afford to be much more generous with its supplies of the AstraZeneca-manufactured vaccine. For reasons of ethics and political expediency, it should do so. I will live without my vaccine for a few weeks longer!

1. https://vaccinetracker.ecdc.europa.eu/public/extensions/COVID-19/vaccine-tracker.html#distribution-tab
2. https://coronavirus.data.gov.uk/details/vaccinations