

The Telegraph

Human Challenge Trials Were A Missed Opportunity

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The first [anniversary of lockdown](#) this week presented an opportunity to review “lessons learned” on confronting the pandemic. So far, the consensus conclusions are fairly predictable yet somewhat inane.

The BBC’s *Panorama* programme on countries that “nailed it” highlighted the virtues of early border controls, South Korean-style testing and contact tracing, paying people to isolate, and consistent, timely public messaging from leaders. Spending big on advanced orders for a portfolio of vaccines and rolling them out under an intelligible plan has obviously been vindicated too in more recent months.

Implementing all such measures would evidently have saved tens of thousands of British lives and avoided the need for damaging, sustained lockdowns. So, to ask the Prime Minister whether he wishes he’d made different choices to implement them is to answer the question. Obviously, tightening borders in January, green-lighting testing in February, avoiding the grand reopening of late summer, maintaining lockdown before the variant took off in December, or providing better guidance on airborne transmission, all [now look no-brainers](#).

Hindsight is a wonderful thing, though. Covid-19 was halfway round the world before even China gripped it. Widespread testing would have severely dented transmission, yes, but given people without symptoms spread it too, PCR testing was no fail-safe once Covid-19 was deep in the community. The summer 2020 lull presented opportunities to improve contact tracing, sure, though that was ultimately quelled by politicians egging us on to normalise life.

“Lessons,” though, are surely more valuable if they have structural implications, rather than just retrospectively highlighting when decisions turned out to be misguided.

One unspoken lesson we might learn is the value of “human challenge trials” for vaccines, where volunteers are paid to be exposed to viruses in controlled conditions. Moderna’s vaccine took just two days to produce in January 2020. Months after that were spent navigating trial protocols in various countries, despite the organization 1 Day Sooner having signed up thousands of would-be volunteers for challenge trials worldwide, with little advertising.

Challenge trials could have accelerated [vaccine efficacy assessments](#), speeding up approval, production, and the end of the pandemic. By giving us data more swiftly, this would have saved thousands of lives and around £3.6bn per week in revived UK economic activity once the pandemic was over. As Jessica Flannigan writes in a cover essay for the Cato Institute, “every day of bureaucratic delay is a day that public officials contribute to the invisible graveyard of people whose deaths could have been prevented by faster access to vaccines.”

Recently, UK officials have partnered with researchers to begin challenge trials for other Covid-19 vaccines and aim to use them to answer other questions about doses or combinations. But in the high-stakes months last year, supposedly ethical concerns won out. It was seen as inherently wrong to use health resources to deliberately infect someone, because you might make them sick and die without a corrective treatment. Of course, the “cost” of such paternalistic precaution was accepting thousands of additional deaths as the virus spread in a largely unprotected community.

That’s the point. In a pandemic, trade-offs are everywhere. But targeted challenge trials’ benefits would have vastly exceeded their costs. By selecting paid volunteers with relatively low death risks (given their age) but otherwise high daily risks of infection (given their jobs), challenge trials might have only modestly increased net risks for those individuals, but with massive societal rewards if the vaccine rollout was brought forward.

Why was it regarded as ethical to allow elderly supermarket workers to bear Covid-19 infection risks in return for wages, but not for younger colleagues to be deliberately infected for the public good? Some ethicists say people judge the uncertainties of the risks badly. But, as economist Sam Dumitriu has explained, society bats not an eyelid in allowing young adults to join the military during wars, at far greater risk and faced with far greater uncertainty.

Yes, politicians may have been unwilling to sanction challenge trials of more vulnerable groups, or else unable to find volunteers. But challenge trials for young people would still have been valuable, even if traditional trials were needed to ensure efficacy for the vulnerable. By showing effective vaccines were coming, policymakers could adjust other restrictions to improve policy. As Dumitriu says, the earlier “proof of concept” would have led to an earlier ramp up of vaccine production too. At worst, those produced could have been administered to young people earlier, contributing to herd immunity.

In fairness, UK regulators have shown a willingness to “think the unthinkable” elsewhere during this crisis. Approving the vaccines before others and the adoption of [“first doses first”](#) showed they recognised the costs of delay and ongoing risks to an exposed public. Widespread antibody survey testing could, in theory, have led to further targeting of vaccines within age groups to ensure herd immunity faster, although that would have been a logistical challenge.

What’s baffling though is that this week’s retrospectives focus overwhelmingly on mitigation or suppression measures, even when it is now obvious that an earlier approval of a working vaccine would have been the greatest stimulus to global economic welfare. Indeed, it still feels as if we don’t really comprehend how much damage could have been avoided through greater urgency on medical innovation.

As a result, when the next pandemic threat arises, we’ll probably see swift border closures, liberalised testing, and, if it gets to that stage, commitments by governments for large advanced vaccine orders. But this year’s biggest tragedy is surely that the medical innovation to end the pandemic existed the whole time. If the lives, economic wellbeing, and liberties we’ve lost while waiting for it to become available do not cause us to reassess our ethical and regulatory frameworks, have we really learnt anything?