

Coronavirus

Pandemic (Britain): 'The case for masks became hugely stronger': scientists admit their Covid mistakes

Monday 7 February 2022, by [DAVIS Nicola](#), [DEVLIN Hannah](#) (Date first published: 4 February 2022).

Being proved wrong lies at the heart of scientific progress. Here, experts reveal what they got wrong during the pandemic

Einstein once observed that “a scientist is a mimosa when he himself has made a mistake, and a roaring lion when he discovers a mistake of others”. Aside from the “he”, the statement accurately sums up the tone of some of the current scientific discourse on Covid-19.

Views on lockdowns, vaccinating children and mask mandates have become increasingly polarised, and social media is unforgiving towards those who voice a change of heart. Yet being proved wrong lies at the heart of scientific progress. In science, an unwillingness to revise your position is normally viewed as an intellectual weakness rather than a sign of moral strength. With this in mind, we asked leading scientists what they got wrong during the pandemic.

Prof Peter Openshaw, theme lead for infection at Imperial College London, did not expect vaccines to be successful

As a scientist you relish having your view changed by the facts. That's different from politics where you've occupied a citadel, where it's viewed as a failure if you concede ground. I honestly didn't think vaccines were going to work. There had been no example of a vaccine for a human coronavirus and the vaccines for animal coronavirus were not that good. We mentioned vaccines in our first report on Covid from Academy of Medical Sciences and said it was unlikely that anything would be available in the near future. So I was completely bowled over when those first trials came through in the run-up to Christmas 2020 and we got this wonderful gift. They were so much more effective than I'd hoped. As a person who has been studying immunity to viruses for 30 years, I should have been able to predict that, if anyone could. Hats off to the Oxford team, they're fantastic people and came up trumps.

Prof Allyson Pollock, professor of public health at Newcastle University, regrets not speaking out against school closures

We knew almost right away, when the blanket lockdown was introduced in March 2020, that children were the least at-risk group, and their education should have been preserved. I wish I'd voiced this more strongly. There were some areas of the country that had almost no cases, and it should have been possible to put in place a cordon sanitaire around remote and rural areas such as the Orkney islands. On schools, closures should have been no more than a few weeks. I was dismayed at the position adopted by the teaching unions. There was a lot of fear and emotion, but

they weren't looking at the evidence or the circumstances that some of these kids were living in, for whom school is a place of safety as well as education. The government could have put in place systems for alternate school days or expanding classroom facilities and recruitment of volunteer staff, but they should have done everything to keep schools open for children. The second round of school closures was a disaster for children. I did speak out early in the first lockdown against banning relatives from nursing homes and the need to redeploy staff to homes, in an editorial in the BMJ. It was really difficult to speak out because it was too politicised. That politicisation was totally wrong in my mind.

Dr Kit Yates, director of the centre for mathematical biology at the University of Bath, made a U-turn on the role of scientists in the pandemic

I initially saw my role, in TV and radio interviews, as explaining the possibilities and limitations of mathematical modelling and key ideas such as exponential growth and the reproduction number. I had vehement arguments on Twitter, defending the role of the scientists who stood beside ministers at press conferences seeming to legitimise the government's approach. Although I didn't agree with some of the policies, I didn't feel it was the place of those scientists to speak out against them. In hindsight, this was naive. Slowly the questions I was being asked in interviews began to change. After an initial look at the data, questions such as "So what should we be doing differently?" or "Have the government got it wrong on this?" were being fired at me. I realised that I had to come off the fence and give answers. I also joined the Independent Sage group of scientists, a cross-disciplinary group of experts, who provide independent policy advice. The experience has radically changed my view on the role of scientists speaking out and advocating for policy. It is not always enough to let the data speak for themselves.

Prof Susan Michie, director of the centre for behaviour change at University College London, changed her mind on the usefulness of masks

Early on, my reading was that the evidence on the effectiveness of face masks in community settings was equivocal. The emphasis on droplet transmission raised a concern that infected people may touch their face masks and then touch surfaces, thus providing a transmission route. The possibility of people behaving less cautiously as result of wearing face masks was also raised. Two things changed. When evidence showed that the major route for transmission was via aerosol rather than droplet, the case for masks became hugely stronger. There was also persuasive evidence from real-world studies, including one from German towns and one on cruise ships. This changed my mind from sitting on the fence to being strongly in favour of masks. I was asked on a TV programme how long we'll be wearing masks. I said "for ever, to some extent", and was cut off before I could elaborate that this would depend on the context and risk of infection. I had months of being trolled and attacked for saying this. But science continues to generate good evidence that masks reduce infection for Covid-19, an airborne virus.

Prof Devi Sridhar, chair of global public health at the University of Edinburgh, thought British society would accept more intrusive surveillance

I think I underplayed the societal differences between South Korea and the UK, including the willingness of publics to be under different levels of surveillance and scrutiny. South Koreans exchanged their privacy, through intense contact tracing with credit cards and phone GPS details, for the ability to continue to move about and continue with daily life, largely. I thought British people would prefer that to full lockdown at home. But I think that such privacy "intrusions" wouldn't be seen as acceptable to the public here, after observing the pandemic now for two years.

Prof Neil Ferguson, epidemiologist at Imperial College London, highlights three things he

called wrong

First, we all underestimated what proportion of Covid infections being imported into the country were being missed by testing of travellers back in February/March 2020. We estimated it was around 70%, while retrospective analysis indicates that over 90% were missed. So it was only when systematic testing in hospitals started from 10 March that we realised quite how far the epidemic had got. Second, while I was expecting the virus to evolve, the extent of evolution seen when Alpha first arose, together with how much the transmissibility (and, to a lesser extent, severity) increased was a surprise. Last, as immunity has grown in the population (due to infection and vaccination) in the last year, social distancing measures have been relaxed and new variants have emerged, predicting the future course of the epidemic, even in the short-term, has become even more difficult than I expected it would be. Partly because of the unpredictability of human behaviour, such as the “Euros” effect in June 2021. But also because, while we can generate fairly good estimates of vaccine effectiveness, transmissibility and severity for new variants within a few weeks of their emergence, each of these has associated uncertainties, which combine multiplicatively when making projections of possible future trends.

Prof Sir Andrew Pollard, director of the Oxford Vaccine Group, has not changed his mind on boosters - but says this has been misunderstood

Several commentators have suggested recently that I am against boosters or that I have changed my mind on boosters. Actually, I haven't. I have consistently been of the view that first and second doses everywhere should be prioritised over third-dose (or fourth) boosters when there is limited supply. Many more lives would have been saved in 2021 if the available vaccine doses had been distributed more fairly around the world. With limited resources, the scientific case for saving many lives trumps the more marginal gains of improving protection with a booster for those who already have a wall of defence against Covid-19. That doesn't mean that I am against boosters, just that I am pro-equity.

Hannah Devlin and Nicola Davis

P.S.

• The Guardian. Fri 4 Feb 2022 15.38 GMT:
<https://www.theguardian.com/world/2022/feb/04/i-didnt-think-vaccines-would-work-scientists-admit-their-covid-mistakes>

Hannah Devlin articles in the Guardian:
<https://www.theguardian.com/profile/hannah-devlin>

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