

1 Imperial College London, UK Cite this as: *BMJ* 2021;375:n3141 http://dx.doi.org/10.1136/bmj.n3141 Published: 23 December 2021

Whitty's critics fail to see that science is driven by what we don't know—not what we do

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The UK's chief medical officer, Chris Whitty, has had a torrid week. He's been called the "sower of financial chaos" by a sketch writer in *The Times*, he has been attacked in the House of Commons for "pressing the panic button" on the omicron variant, for putting the country into an "effective lockdown," and for turning England into a "public health socialist state."

It's quite a charge sheet for the mild mannered chief medical officer who has spent the past 23 months meticulously reading the scientific runes on the progress of the covid pandemic, advising government ministers of his conclusions, and issuing calm, measured, authoritative updates for the public.

In doing so he has won wide respect from a public eager to hear from a figure they can trust. His solemn countenance and quiet delivery has become a welcome presence in the country's living rooms as people tyre of the prime minister's "boosterism" and bluster in the face of a deadly threat from a new variant of the SARS-CoV-2 virus, whose potential to kill is unknown and still, to a substantial degree, unknowable.

What has mobilised his libertarian critics in the Tory party was his carefully calibrated advice delivered alongside Boris Johnson at last week's Downing Street press conferences when the prime minister insisted that Christmas is not cancelled and people could still attend Christmas parties. Whitty by contrast urged people to "prioritise what really matters to them" and only attend those social gatherings they regarded as most important, cutting down on those which mattered less.

The accusation from several ministers and MPs that in doing so he has strayed beyond his job description as an "unaccountable" public servant is baffling. On Thursday 16 December, Whitty was publicly held to account in a two hour grilling in front of the Commons health select committee in which MPs renewed their attack. In response, Whitty calmly insisted that his advice was what "any chief medical officer would have given," citing the scientific evidence that we have so far.

There are reasons to think he was right. Science has been likened to looking for a black cat in a darkened room with no guarantee the cat is even present. Scientists don't concentrate on what they know, which although considerable is also miniscule, but rather on what they don't know. Science is driven by and cultivated by seeking to find answers to what we don't already know.

Whitty didn't use the black cat metaphor, but he did carefully explain to the MPs on the committee that what really worried him about the omicron variant was that there were some "really critical things we don't know," which made him "extremely cautious" about the models, because small differences in the modelling produced hugely different numbers of hospital admissions.

This creates difficulties for policy makers. Uncertainty is a defining feature of crises. But we cannot answer the question "Which way should we go?" with the response "I wouldn't start from here." Even now, as the pandemic continues to kill hundreds of people each week in the UK, scientists are continuing to argue about whether the evidence is sufficiently definitive to indicate tighter restrictions are needed.

How do we decide what to do when the problem is urgent, but certainty eludes us? Whatever the answer, it is not by traducing the one man who has done so much to weigh up the available evidence; assess the level of threat; and keep our health, our lives, and the NHS safe.

Competing interests: none declared

Provenance and peer review: not commissioned, not peer reviewed.

1 The Times. Quentin Letts: Wary Whitty's dead bat splintered by Tory fury. December 2021. https://www.thetimes.co.uk/article/quentin-letts-wary-whittys-dead-bat-splintered-by-tory-fury-fbgjpm8jz