## Twitter Thread by Deepti Gurdasani





My thoughts on the govt announcement yesterday regarding a new viral strain potentially driving an increase in cases in London. The claim, at least from listening to the daily briefing seems to be based on the strain increasing in frequency more recently. 1/N

Cases have been rising exponentially in England- much of the increase being attributed to the South, although declines have slowed even in the North following easing of lockdown. Much of this is anticipated, and expected, given the behaviour of the virus. 2/N

SARS-CoV-2, like any other viruses mutates as it multiplies (albeit slower than influenza). Mutations occur randomly and most are 'neutral' - i.e. have little to no effect on transmission, ability to evade the natural or vaccine-related immune response

Having said that, few mutations have been shown to be less likely to be neutralised by plasma from patients infected by the usual (wild-type) virus. Whether this translates to a lower response to vaccines or higher risk of re-infection is unclear at the moment.

Also worth noting that just because a variant becomes more frequent in a region doesn't necessarily mean it offers a fitness advantage to the virus. Many mutations rise to different frequencies in different regions due to random processes. The frequency of strains varies globally

So the claim that the current strain is the cause for the exponential rise of cases in London isn't currently backed by strong evidence. We need to wait and see as more data emerge. It is equally possible that the rise in cases is due to easing of restrictions, given the timing.

The govt likely took action due to the exponential rises, rather than the emergence of a new strain. If the govt actually strongly believed this strain was more transmissible, they should have done much more than move London into Tier 3 (e.g. secured borders to contain spread)

Another area where the government has prematurely made claims without clear evidence at the moment. It is possible this strain is more transmissible, but the data provided briefing yesterday do not adequately back this up, in of itself. We need more evidence to make such claims.

The govt needs to be clear about the uncertainty around this, rather than making claims about cause and effect, which we cannot from the data available so far. IMO, more appropriate to link the restrictions to the predictable rise in case numbers following easing of lockdown.

Also, important to note that whether this mutated virus has important impacts on transmission or vaccine efficacy, the probability of mutation increases as we let the virus spread across the community. It's no coincidence we're seeing new viral strains.

It's a consequence of high levels of community transmission. Even if this strain turns out to be harmless, every mutational event increases the risk of a new strain emerging that may not be as harmless. If the govt wants to mitigate risk, it should aim for maximal suppression.

This is the best way to prevent emergence of new strains, and to protect our precious vaccines.

An update on this- this preprint from the <a href="Mailto:@GuptaR\_lab">@GuptaR\_lab</a> outlines what we know about the variant currently: <a href="https://t.co/SziLXNPM8Z">https://t.co/SziLXNPM8Z</a>