

OMICRON: THREE QUESTIONS THAT NEED ANSWERS

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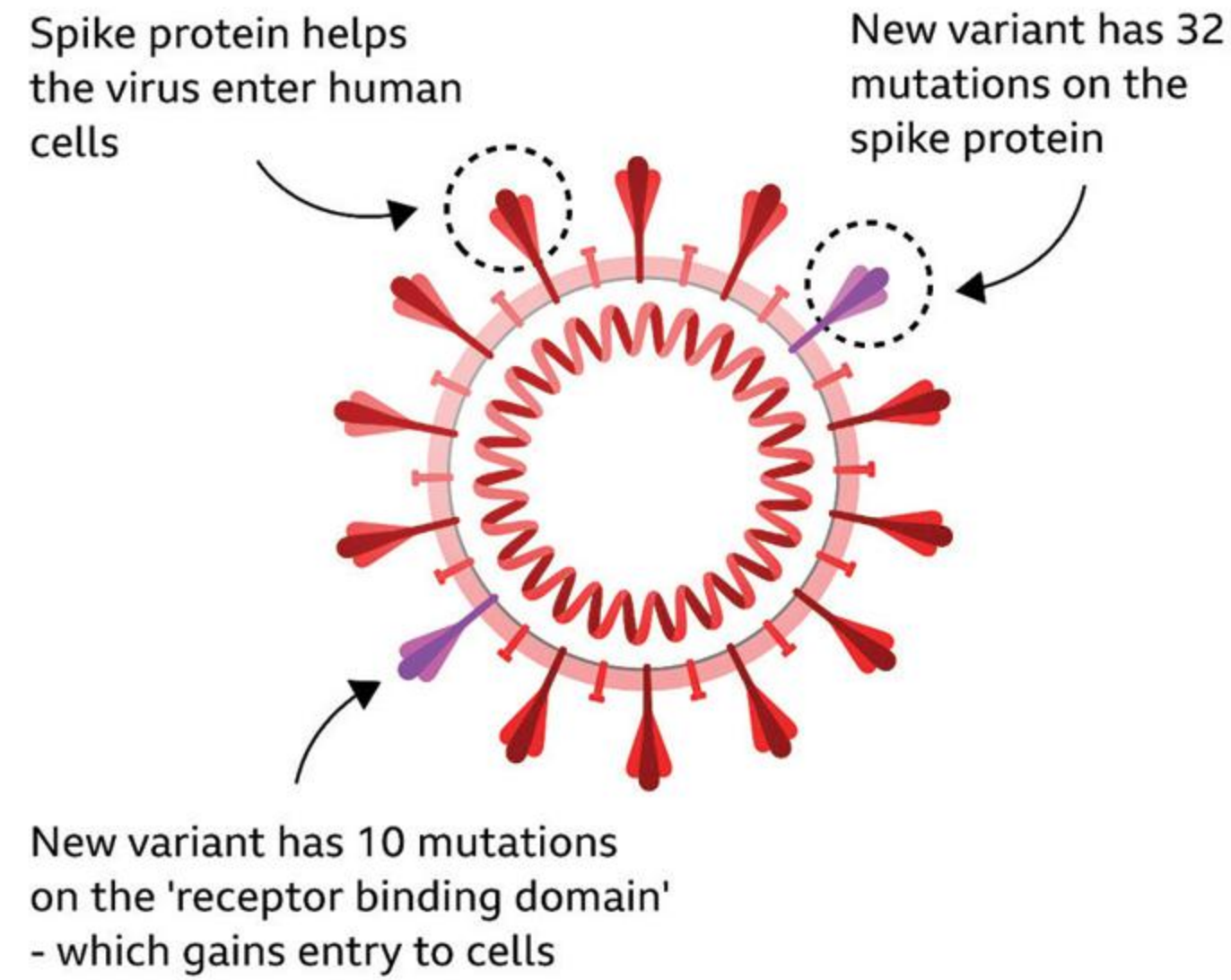
Every few months, the world learns of a new variant of the Coronavirus. While most of these variants turn out to be inconsequential, some, like the Delta variant, are immensely consequential. The latest, B.1.1.529, now known as the Omicron variant (from the Greek Alphabet), bears very close watching because of concerns that it may spread more quickly than Delta, possibly even among the vaccinated. It is essential that world leaders respond quickly and aggressively even before all the data about this variant emerge.

In the days ahead, as information builds, it will be tempting to give in to fear or indifference. We cannot succumb to either. The global community must take each variant seriously. Acting early is far superior to waiting until all the facts are in. It may turn out that the variant is not more contagious or that it responds perfectly well to our current vaccines (such as those by Pfizer and Moderna). In that latter fortuitous scenario, the current response may be seen as an over-reaction. But if this variant, with all of its concerning features, turns out to be as contagious and immune-evasive as many experts worry it might be, waiting until all the facts are in will leave us hopelessly far behind.

How worrisome is the Omicron variant? There are three key questions

Omicron variant

More mutations may make it spread faster



that help scientists understand how consequential any variant might be.

New variant

The first question is whether the variant is more transmissible than the current, prevalent Delta strain. Second, does it cause more severe disease? And third, will it render our immune defences — from vaccines and prior infections — less effective (a phenomenon widely known as immune escape)?

On transmissibility, the data, while early, look worrisome. This new variant appears to have taken off very quickly in South Africa (a few other

African countries), with early national data suggesting the variant already makes up the majority of sequenced cases in the country. It is possible that this early data will be revised as epidemiologists look closer at factors other than transmissibility, such as whether an early Omicron superspreader event led to the variant appearing more highly contagious than it really is. While this is possible, the more likely scenario is that Omicron does spread more easily than Delta.

Because the variant is so new, scientists simply do not have adequate data yet to assess whether the new variant causes more severe disease. Answering this question will require careful

case tracking in hospitals along with expanded viral sequencing efforts, both in South Africa and elsewhere. A key part of this analysis is ensuring that countries are doing adequate genomic sampling and testing of a broad group of people. It will most likely take weeks to sort this out.

Finally, the big concern with Omicron is immune escape. Let us be clear: It is extremely unlikely that Omicron will render the Covid-19 vaccines completely ineffective. And right now, there is not much data on how much the vaccines may be less effective against this variant, although there is reason for concern. Omicron has a large number of mutations, including in the spike protein — the part of the protein that the virus uses to bind to and enter human cells. These areas of the protein are critical for vaccine-induced (and infection-induced) antibodies to protect against the virus. Even small hits to vaccine efficacy will leave us more vulnerable to infection and illness and can make

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it harder to contain the rampaging virus.

Travel ban

The Biden administration just announced a travel ban against foreign nationals coming from eight African countries. This will slow the spread of the virus into the United States by a modest amount at best. And it sends a negative signal to South Africa, which has done an extraordinary job in first identifying the variant and then quickly sharing the information with the global community. Whether the travel ban will be worth it or not is far from clear.

But there are things the Biden administration can do to prepare the country. The United States must support ongoing studies that help researchers answer the key questions about how transmissible the variant is, whether it causes more severe disease and whether it can evade immunity. This will give health authorities a more complete picture as quickly as possible.

The COVID-19 Omicron variant is raising health concerns amidst the busy holiday travel season.

Se ram mon they evolve over time — to identify Omicron when it arrives and track it as it potentially spreads through the country. The United States has been a surprising laggard on genomic sequencing and must do better.

American leaders should also start talking with vaccine makers about the potential need to create Omicron-specific vaccines. It may not be needed, but if there is a large hit to vaccine efficacy then new vaccine shots will be critical.

Lastly, America must push for a global effort to get more people in Africa vaccinated. While global vaccinations have been rising quickly, much of the African continent has been left behind. In South Africa, just under a quarter of the population has been fully vaccinated.

It has been a long pandemic thus far, but let us remember that this is not a reset to March of last year — the world has the means to manage this variant. Let us use them.

(Dr. Ashish K. Jha is Dean of the Brown University School of Public Health)

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