## 2021: A COVID retrospective





As I write this, President Biden has just declared that it will be "a winter of severe illness and death for the unvaccinated . . . but there's good news: if you're vaccinated and you have your booster shot, you're protected from severe illness and death."

Not a cheery message.

But, as Yogi Berra once famously said, "It's tough to make predictions, especially about the future."

Trouble is, while vaccines confer significant protection against COVID, the majority of infections we're seeing are now breakthroughs. And it's far from certain that Omicron will exact the same toll as Delta and its precursor variants. Maybe yes, probably no.

Here in New York, we're seeing a surge in infections, but that may be, at least in part, the result of more testing. At the local urgent care around the corner from me, lines of test-seekers snake down the whole block. I doubt they're sick, they just seem annoyed by the long wait. Perhaps they're reading the alarming headlines and are panicked because they have a little scratchy throat; or maybe they've been told by friends, coworkers or family members who tested positive that they might have been exposed; or, alternatively, they're just trying to obtain the necessary

clean bill of health to take a plane flight to a holiday vacation destination, to attend an event, or to go home and visit mom and dad.

I'm not particularly worried about the surge in cases, as long as there's no evidence that hospitalizations and deaths are spiking, (which so far they don't seem to be with Omicron, although it's early) or that the virus is suddenly changing character to more seriously affect the young and otherwise healthy.

So the President's formulation is, at best, outdated and simplistic, and fails to account for natural immunity, an underlying flaw in the vaccine push.

What are we to make of **stories like this** that underscore the need for shots, regardless of whether you've had COVID? "COVID vaccines five times more effective at preventing COVID-related hospitalization than prior infection alone, study finds: Findings suggest people who recovered from the virus should still receive vaccines."

The authors of the paper emphatically conclude: "All eligible persons should be vaccinated against COVID-19 as soon as possible, including unvaccinated persons previously infected with SARS-CoV-2."

But the study admits to limitations: "If vaccinated persons are less likely to seek testing, some positive SARS-CoV-2 test results might have been missed and thus some patients classified as vaccinated and previously uninfected might also have been infected."

Also: "Residual confounding might exist because the study did not measure or adjust for behavioral differences between the comparison groups that could modify the risk of the outcome." i.e., people who've already had COVID and don't believe in vaccines might be less risk-averse, less healthy overall, and more likely to engage in behaviors that could expose them to the virus—or render them more likely to be hospitalized.

Finally, the additional five-fold risk of hospitalization among unvaccinated persons with prior COVID was skewed by age; for over 65s it was nearly 20-fold higher! But there's no mention in the study of what pre-existing comorbidities they had—heart disease, COPD, obesity, diabetes?

Among those in the large tranche 18-64, hospitalization was infrequent and a mere 2.5 times higher. So what was the additional risk in healthy younger or middle-aged folk? Doesn't say. Probably even lower.

At best, the study suggests that vaccination after a prior diagnosis of COVID offers additional protection to the elderly.

Another study proclaims: "Unvaccinated people are likely to catch COVID repeatedly." It finds that natural immunity appears to wane rapidly after three months. The conclusion again supports the vaccine narrative: "Therefore, those who have been naturally infected should get vaccinated . . . previous infection alone can offer very little long-term protection against subsequent infections."

But wait a minute. I just watched a Brooklyn Nets game where 7 key players, including all-star guard James Harden, were sidelined due to "COVID protocols" (Heroically, the team prevailed with rookies and bench players delivering a winning effort!). NBA players are all vaccinated. Same is happening throughout the NFL, which is fielding second-stringers. Most of those who tested positive are not even sick. What gives?

Similarly, Jen Psaki, White House Press Secretary and staunch defender of vaccine mandates, was herself out of commission due to a breakthrough infection. Now, vaccinated and boosted members of Congress are coming down with it.

And, with the emergence of the new Omicron strain, it's unclear the extent to which either natural infection or vaccination—boosted or not—will offer significant protection. So, reflexively doubling down on vaccines and boosters is, well, unscientific, and smacks of desperation.

All bets about vaccine efficacy may be off now that we're confronting the Omicron variant. A new pre-print of an article, authored by 20 international scientists, predicts, "The Omicron variant presents a serious threat to many existing COVID-19 vaccines and therapies."

A more nuanced view of the durability of natural immunity appeared in the BMJ, one of the few major medical journals that, while supporting vaccines, challenges the one-size-fits-all dogma. Many countries allow for "Green passes" for those who have documentation of a prior COVID infection. In the UK, for example, people with a positive polymerase chain reaction (PCR) test result can obtain the NHS covid pass up until 180 days after infection.

And vaccinating people too soon after natural infection may even have drawbacks. The BMJ article notes: "A large study in the UK and another that surveyed people internationally found that people with a history of SARS-CoV-2 infection experienced greater rates of side effects after vaccination."

I'm optimistic for 2022. People are tiring of COVID and the incessant hectoring by government officials and the media. New therapeutics are arriving and will backstop us against breakthrough infections if the vaccines remain "leaky". And the rapid spread of Omicron may have a silver lining: widespread herd immunity against a broad spectrum of forthcoming COVID variants.

Meanwhile, I'm encouraging you to stay healthy as your best bulwark against COVID. After feeling so disempowered in the face of an implacable scourge, let's reclaim the locus of control. Diet, supplements, sleep, and exercise can make a huge difference. I'll be telling the story in detail in 2022—stay tuned for details.

Meanwhile, I offer this study as confirmation that exercise can help us fend off severe COVID. It found that "physical inactivity was associated with an increased risk of severe COVID-19"—by six and a half-fold!

So make your New Year's Resolution to get moving!