Dr. Delgado COVID-19 Update 5-18-20

WHAT ABOUT THE INFLUENZA VIRUS?

A growing scientific consensus is signaling that the SARS-Cov-2 strain will reemerge in the fall. If this temporally
aligns with the seasonal influenza virus endemic spread, it could be cataclysmic.

The initial clinical presentations are essentially indistinguishable and this could potentially lead to another
crisis in supplies and more importantly the capacity for care.

The normal yearly influenza vaccination rate tends to be around 50% in the US which is abysmal. This level of non-compliance in regard to a patient's proclivity to obtain a vaccination remains perplexing. The influenza vaccination is scientifically proven to be efficacious in
reducing the influenza virus' morbidity and mortality across all demographics.

A massive and focused campaign, both federally and locally, should begin immediately to signal that an influenza vaccination this fall is paramount and provides a valuable public health service. Much higher rates of vaccination should be the goal and, in my opinion, become
a clarion call for all of society.

Currently, most medical facilities do allow those employees who refuse vaccinations for influenza their right of refusal, but this subsequently entails that they are mandated to wear a mask to mitigate their risk to others during the entire influenza season.

How to properly address that segment of our society that continues to refuse an influenza vaccination moving forward? And that additional cohort that will also refuse any Covid-19 vaccination when it becomes available? This will almost certainly become a hot button issue as we enter the fall.

COOPERATION

When a deadly disease breaks out and threatens the world, are countries obliged to share laboratory samples and other information to help fight it?

Unfortunately no, they are not. In 2007, Indonesia refused to give the World Health Organization samples of an H5N1
Influenza strain from an outbreak in the country until it was guaranteed fair access to any vaccines created from the
material. Indonesia is not the only country involved in this debate. In 2018, without explanation, China withheld laboratory samples of the H7N9 bird flu, despite repeated requests from the United States and Britain to share the material. Welcome to the world of “viral sovereignty.”

With the coronavirus death toll passing 300,000, this pandemic has revived the issue of whether countries can claim ownership of pathogens that have emerged within their borders, according to the authors of an opinion piece in Science magazine last week.

The genetic sequence data for the new coronavirus that causes Covid-19 was shared by Chinese researchers within the scientific community on January 10.
Researchers in several countries have noted that this was a quick turnaround, given that China first informed the
WHO of the outbreak on December 31.

The WHO tried to resolve this issue with the introduction of the Pandemic Influenza Preparedness Framework in

2011, but the new rules affirmed “sovereignty” as a legal norm and imposed no direct legal ramifications for not sharing viruses with the WHO or any other countries.

Other rules like the WHO’s International Health Regulations, require member states to notify the WHO within 24 hours of all relevant “public health information”
on anything that may constitute a public health emergency of international concern.

But those rules do not classify genetic sequence data as health information nor are physical pathogen samples regarded as health information either. Now scientists are concerned that the current soured political atmosphere, combined with loopholes in existing international
frameworks, could impede the sharing of genetic data and virus samples into the future.

We would all logically presume that respiratory viruses are not constrained by borders and there’s just an ethical and
moral obligation to be open about the illness and any sequence data that one may possess.

Unfortunately, that is not the case at this present time. This merits the formulation of an apolitical platform involving scientists and leaders toward such stated goals now and into the future.

UNIVERSAL TESTING?

While mass Covid-19 testing might seem intuitive, its benefits are unlikely to meet the high expectations for it.

Frequent testing of the entire population would help identify so-called hidden carriers— individuals infected with Covid-19, but who have no symptoms of it. They seem to play an important role in the spread of Covid-19. Identifying these "silent spreaders" could help public health workers be more effective at contract tracing.

But this argument isn't as strong as it might seem. Asymptomatic spread is contact tracing's Achilles' heel. Even if testing the entire population was able to identify most silent carriers, this would almost certainly come with a delay in putting this information to use because testing wouldn't occur continuously and there would be a lag in test results. This is particularly true since Covid-19 readily spreads during a short interval of a few days, most typically in the early stages of an infection.

Even with the remote possibility that the testing capacity would be able circumnavigate the population every two weeks and in conjunction with a 24-hour lag in results, universal testing would likely catch less than half of asymptomatic carriers during their most infectious period.

Testing those without symptoms can also lead to an abundance of false alarms. PCR testing for the virus, which is the best way to identify an active infection, can detect the presence of Covid-19— or remnants of it — for weeks, even when the infection is unlikely to be transmitted to others. Testing the entire population would undoubtedly identify a large number of such individuals, sidelining them from work and society and in many instances unnecessarily.

I believe that, likely, the most important role of testing will be for monitoring acute infections within communities to therefore guide the tightening and loosening of social distancing restrictions as necessary. During influenza

season, the Centers for Disease Control and Prevention regularly conducts such sentinel surveillance to alert health care providers when cases are on the rise.

Though well-intended, when it comes to Covid-19 testing for the entire population, the results may not justify the effort or allocation of resources it would entail. We can't just test our way out of this pandemic. Instead, we would likely be more effective by coupling a strategy that stresses smart, judicious testing with a multitude of simple, high-value and proven interventions such as continued social distancing, face coverings and regular hand hygiene.

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