Pandemonium

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Now 3 months out from the Annual Scientific Meeting in Reno, my best guess as of this writing in December is that COVID will still be the major headline. The evolving information and projections are that the Omicron variant is taking the lead in the next wave of the pandemic. Leading to a pertinent question: do we have a pandemic, an epidemic, or an endemic? I am not hopeful that we will be able to categorize this into a neat box. However, my intuition is that we need a new term to describe the next phase of COVID. My entry is "Viral Variable Semi-Cyclical Pan-Endemic." Look for this definition in the Urban Dictionary or the OED: "an infectious disease of viral origin that has already spread globally (pan-) but has settled (-endemic) into a pattern of unpredictable (variable) recurring waves infecting the populace with novel variable variants (spontaneous mutations, genetic swapping with other viruses, and survival-of-the-fittest against the best of vaccines and medications) that challenge the best and brightest of international experts and scientists, yet stimulate political self-interest and the murky motives of purveyors of dis- and mis-information and dark web opportunists." Of course, there must be an acronym, and as the inventor of the term I nominate VVSCPe. Look for it on your favorite social media outlet.

The real take-home lesson at this point in our COVID history is that we cannot assume or take anything for granted. Though medicine, science, and industry have performed amazing feats to come up with the current vaccines, we seem to be one or more steps behind. From a prevention standpoint, current COVID vaccines are effective against a limited scope of variants but may not be providing the broader scope of protection desired given the Omicron variant breakthrough. I note that the 2022 influenza vaccines are quadrivalent for broader protection, and perhaps that will be our future regarding COVID. But even the efficacy of the influenza vaccines is dependent on educated projections some 18+ months in advance of what strains will be prevalent, with the limiting factor being the time needed to ramp up development and production of vaccines on a massive scale. And the international science community has decades of influenza experience!

An irony of COVID is that it may provide an opportunity for mass public re-education about the respective strengths, weaknesses and necessary integration of all elements required for individual and public health. As I may have previously referenced, the work of the international aviation medicine community to develop a multi-layered model for preventions based on Reason's Swiss cheese model is a thing of beauty. And incredibly complex, requiring all layers to work continuously and effectively for

optimal results. Where the model leaves off is where the "treatment" phase starts.

To date, treatment has been almost strictly reactive using more existing therapeutic approaches to hopefully corral and minimize the pathology created by the disease. Monoclonal antibodies and adaptation of other known antiviral regimens



have certainly provided some benefit. However, drugs designed specifically to counter COVID appear to be the high priority. As of December 22, the US FDA approved a Pfizer oral antiviral medication promising for reductions in the morbidity and mortality of COVID. The approval, once again, is an emergency use authorization and hopefully soon will be widely available. Use within 5-7 days after symptoms onset may be a significant limiting factor for reducing severe or fatal disease. Given the suspicions, misinformation, and disinformation spread by social media about vaccines raises the question "if we lead the patients to the medication, will they swallow it?"

Throughout our COVID era (has it been around long enough to warrant the moniker "era"?), other health concerns seem to have been shoved to the back of our consciousness. In particular, influenza seems to be almost an afterthought. But, because of the push to get COVID vaccine initial doses and boosters, my casual observation is that getting the flu vaccine now is viewed as relatively more benign and routine. I'm also noticing that among family and acquaintances a lot more awareness of the importance of vaccinations and in getting all recommended vaccines. Of course, this is within my own personal circle, and suspect that people who are resistant to COVID vaccination may remain more hard-over against vaccinations in general. Time will probably tell. However, the U.S. CDC reported that as of the second week in December 2021 the number of positive influenza tests was climbing rapidly.

Perhaps by the time this is published in February, the culmination of prevention, vaccinations, and new targeted therapeutics will have marked effect to reduce the impact of COVID. I certainly hope so, lest we experience an adverse impact on attendance and participation at the Scientific Meeting in Reno. Plan for the worst but hope for the best. A bit of research shows that the month of February was derived from the Latin term februum (cleansing) and a purification ritual "Februa." Perhaps we will start seeing some "cleansing" of COVID from the global population this month.

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