

3.70: The Motivation We Need to Reach the End of the COVID-19 Pandemic with Dr. Monica Gandhi

➤ Type Plenary Session

We Discuss:

- Conversation with Dr. Monica Gandhi [1:06]
 - Peeling back restrictions [1:19]
 - Vaccinations [6:30]
 - Global care and variants[10:00]
 - Michigan [20:57]
 - Science communication [26:26]
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Plenary Session 3.70 Show Notes

Overview

Conversation with Dr. Monica Gandhi [1:06]

- **YouTube**
 - [Watch this conversation on YouTube](#)
- **Introduction**
 - [Monica Gandhi MD, MPH](#) is Professor of Medicine and Associate Division Chief of the Division of HIV, Infectious Diseases, and Global Medicine at UCSF
- **Peeling back restrictions [1:19]**
 - When might we do that? And what are the triggers for it?

- We have had a complication relationship with restrictions because of the collateral damage associated with them (e.g., children not being in school, other health problems, etc.)
- These are the metrics that will tell us when we can safely lift restrictions
 - Washington Post Op-Ed by Madad et al.



"The goal for hospitalizations from covid-19 should be less than 5 cases per 100,000 people, or about 16,000 hospitalizations in the nation, less than half of where we are right now. This is lower than the hospitalization rates from influenza during the height of the flu season, which normally shows an average of 20 to 40 hospitalizations per 100,000 people, but mortality for hospitalized covid patients remains very high." - Madad et al.

- Why is this the case?
 1. Influenza is not as deadly as COVID in the hospital
 2. COVID vaccines are more effective than flu vaccines
- Dr. Prasad points out that these outcomes are not based on PCR positivity but bad outcomes (i.e., more representative)
- There is a psychological component as well
 - By predefining a goal of vaccination and hospital rates, restrictions can be lifted if they are met → giving people a sense of progress and hope
- **Vaccinations [6:30]**
 - Should we be doing mass asymptomatic testing after vaccination?
 - Monica Gandhi says no
 - She thought about this question in the context of the UK who's doing a lot of mass asymptomatic testing after vaccination
 - What they're revealing are PCR positive cases that are likely non transmissible with very low viral load

- Instead, tests should be offered for:
 1. Unvaccinated if exposed (symptomatic or asymptomatic)
 2. Symptomatic after vaccination
- Do Kids Really Need to Be Vaccinated for Covid? Yes. No. Maybe.
 - Published in Undark by Sara Talpos



"It's simple math," wrote Monica Gandhi, an infectious disease physician and professor at the University of California, San Francisco, in an email to Undark. "We don't need to vaccinate those under 11 to get to herd immunity." - Talpos

"If someone were to argue that one of the reasons we ought to mandate [the vaccine] in kids is to protect adults who choose not to be vaccinated—that to me introduces kind of a quandary—because we want the adults to want to be vaccinated." - Dr. Prasad

- **Global care and variants[10:00]**

- India's devastating second wave: 'It is much worse this time'
 - FT Article by Parkin et al.
- Is there a constraint on how much the spike protein can mutate?
 - Because Dr. Gandhi works with HIV, she understands the concept of fitness
 - HIV has poor fidelity because of "leaky polymerases" so it can mutate very readily
 - That's why we use combination antiretroviral therapy for HIV
- There is a fitness cost to the virus if it mutates—meaning it will not be able to replicate as fast

"I think that the thing to think about the spike protein of the Coronavirus (SARS-CoV-2), and the same thing happened with

influenza, is that it will be able to develop some sound mutations on the surface, maybe those will have an evolutionary manager sticking more to the receptors so that it can create higher viral loads and spread more readily. But it will not mutate forever and and be a super pathogen that will evade our vaccines" - Dr. Gandhi



"Among the convalescent individuals, there were 132 SARS-CoV-2-specific CD8+ T cell responses corresponding to 52 unique epitope reactivities directed against several structural and non-structural target epitopes from the entire proteome." *Redd et al.*

- **Michigan [20:57]**

- Dr. Gandhi makes a distinction between masks and vaccines
 - Masks are *tools*, along with other mitigation strategies, to help slow the spread of the virus
 - Vaccines are the *solution*
- Schools
 - One concern was the threat of closing schools,
 - Namely because schools are places that have always been safe, and the idea of closing schools again, when they were just managed to open seems wrong for children's mental health

- **Science communication [26:26]**

"I actually have a very clean philosophy of science communication, which is that I'm not wedded to any idea" - Dr. Gandhi

- If you just look dispassionately at facts, you don't have to become wedded to an idea

Plenary Session is a podcast on medicine, oncology, & health policy.

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