4.36: Where Are We Now with COVID-19? with Dr. John Ioannidis

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We Discuss:

- Introduction [0:38]
- Omicron [1:00]
- Travel bans [6:00]
- Vaccination [9:00]
- Vaccine advisory committee [14:57]
- Disparities [21:00]
- Bangladesh [34:40]
- Active surveillance [42:42]
- Testing [48:36]
- Media experts [1:04:00]
- Debates [1:18:46]
- Reproducibility [1:27:00]
- Theranos [1:31:57]
- Moving forward [1:37:00]

Plenary Session 4.36 Show Notes

Overview

- YouTube
 - Watch this conversation on YouTube
- Introduction [0:38]
 - Dr. John Ioannidis is a Professor of Medicine and Epidemiology at Stanford
 - He received his MD from the National University of Athens
 - He completed his medical training at Harvard and Tufts, where he specialized in internal medicine and infectious disease.
- Omicron [1:00]
 - Surrogates
 - When a new variant is discovered, the first action taken is to determine what prior vaccination does in terms of neutralizing antibodies against an emerging variant
 - However, this is a surrogate for, "Will this new variant cause severe disease?"
 - It is difficult to judge the surrogates we have for vaccine effectiveness
 - In the end, what matters most is *clinical data*
 - That said, surrogates are an important tool for epidemiology
 - Typically surveys at the population level (not to be used for clinical decision making)

• Travel bans [6:00]

- Balancing viral seed load vs. socio/economic/political impacts
 - Dr. Ioannidis is a skeptic of travel restrictions but believes they have a place in some instances, such as when a disease is particularly hazardous in a specific geographic region

"But I think that much like other measures, we should always balance what they can achieve versus what they mean in terms of harm in terms of disruption in terms of destroying people's lives." - Dr. Ioannidis

- Vaccination [9:00]
 - COVID-19 vaccination in children and university students
 - Ioannidis; European Journal Clinical Investigation
 - VP's response
 - John Ioannidis' (J P A I's) New Paper On Vaccinating Kids & College Students | One Doctor's Summary



- Decisions
 - Dr. Ioannidis states we should not create uncertainty for folks who are debating whether or not to be vaccinated.
 - Dr. Ioannidis advises physicians to discuss vaccine safety with parents and to emphasize that there is no evidence that COVID-19 vaccines cause death or serious AE's at an alarming rate

• The risk-benefit analysis should be a very open discussion, and it becomes much more critical if the children have any comorbidities

• Vaccine advisory committee [14:57]

- Models and regulatory decisions
 - Randomized trials are needed to answer important policy questions rather than meta-research models
 - In the meantime, while larger RCTs with optimum follow-up are being conducted, tentative decisions may be made.
 - Modeling is a tool, but also has many limitations

"Modeling has to do so much speculation and so many assumptions that you kind of end up concluding what you thought before you did the modeling" - Dr. Ioannidis

- Disparities [21:00]
 - <u>34,000 L.A. Unified students have not complied with vaccine mandate, signaling</u> problems ahead
 - LA Times
 - Public health
 - The goal of public health should be to help everyone but even more so the disadvantaged
 - COVID policy did not reflect these ideals; in fact, it worked against them in several ways
 - Public health should do all possible to assist these individuals in avoiding more marginalization, suffering, or feeling as though their lives are more difficult as a result of what the authorities do
 - Obtaining majority agreement is one of the obstacles inherent in public health policy
 - One possible approach is for politicians to forego public health, communication, and message

• In this manner, policy may become less heated and political

"Tying experts to political parties does create that high risk environment that that people then become believers in, they just get attached to their political inclinations, and they decide whether to do something or not based on what their party is going to tell them" - Dr. Ioannidis

• Bangladesh [34:40]

• Bangladesh RCT reanalysis twitter thread



9:41 AM · Dec 2, 2021 · Twitter Web App

• What were the effects of the Bangladesh mask intervention?

Maria Chikina, Wes Pegden, and Ben Recht • Dec 1, 2021

• Active surveillance [42:42]

- How does Dr. Ioannidis think about passive versus active surveillance?
 - He points out that adverse events have received little attention compared to effectiveness in all of clinical research preceding COVID-19
 - When it comes to accurate information, active vs passive monitoring makes no difference since the multiplier factor is unknown
- Solutions
 - We need more in-depth research that gather data in a more active and systematic manner
- <u>Completeness of Safety Reporting in Randomized TrialsAn Evaluation of 7</u> <u>Medical Areas</u>
 - Ioannidis & Lau; JAMA; 2001
- Testing [48:36]
 - With so many individuals affected and the virus spreading to so many diverse locations, is there a role for testing?
 - Dr. loannidis is a proponent of testing in principle
 - Testing is always a good idea in some contexts, such as nursing homes, very high-risk settings, or during an active infection wave
 - In other circumstances, the benefits may be less
 - Excess deaths
 - It is known that people don't fill out death certificates with high accuracy (similar to medical records)
 - Excess deaths are composed of multiple factors:
 - 1. COVID-19
 - 2. Indirect effects of COVID-19
 - 3. Direct and indirect effects of measures
 - 4. Modeling about time series of mortality

• Media experts [1:04:00]

- <u>Overall and COVID-19-specific citation impact of highly visible COVID-19 media</u> <u>experts: bibliometric analysis</u>
 - Ioannidis et al., BMJ Open

"We assessed 76 COVID-19 experts who were highly visible in US prime-time cable news, and 50, 12 and 2 highly visible experts in media in Denmark, Greece and Switzerland, respectively. Of those, 23/76, 10/50, 2/12 and 0/2 were among the top 2% of overall citation impact among scientists in the same discipline worldwide. Moreover, 37/76, 15/50, 7/12 and 2/2 had published anything on COVID-19 that was indexed in Scopus as of 30 August 2021. Only 18/76, 6/50, 2/12 and 0/2 of the highly visible COVID-19 media experts were women. 55 scientists in the USA, 5 in Denmark, 64 in Greece and 56 in Switzerland had a higher citation impact for their COVID-19 work than any of the evaluated highly visible media COVID-19 experts in the respective country; 10/55, 2/5, 22/64 and 14/56 of them were women." - Ioannidis et al.

"Being an expert or being an *acclaimed* expert does not secure that you will come up and say something that is true" - Dr. Ioannidis

- Evidence based medicine has been a brilliant idea but it has stumbled upon innumeracy and literacy
- Debates [1:18:46]
 - Great Barrington Declaration
 - Public health policy in the 1980s, 1990s, and 2000s was predicated on the premise that we needed to do more for the most vulnerable while letting society continue

"I think more of our professional class lost their jobs, they would be more up in arms about this [restrictions]" - VP

- The Downsides of Masking Young Students Are Real
 - Prasad; The Atlantic
- John Snow Memo

Reproducibility [1:27:00]

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- Investigating the replicability of preclinical cancer biology
 - Errington et al., eLife

"Replicability is an important feature of scientific research, but aspects of contemporary research culture, such as an emphasis on novelty, can make replicability seem less important than it should be. The

Reproducibility Project: Cancer Biology was set up to provide evidence about the replicability of preclinical research in cancer biology by repeating selected experiments from high-impact papers." - Errington et al.



• Theranos [1:31:57]

- <u>Stealth Research: Is Biomedical Innovation Happening Outside the Peer-</u> <u>Reviewed Literature?</u>
 - Ioannidis; JAMA; 2015
- Moving forward [1:37:00]

"Our life has been disrupted in major ways, we should try to find some psychological column in some sense of belonging, some sense of social cohesiveness, and also love" - Dr. Ioannidis

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

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