

3.71: How Research Influences Policy with Dr. Kirsten Bibbins-Domingo

↗ Type Plenary Session

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- Conversation with Dr. Kirsten Bibbins-Domingo [1:09]
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Plenary Session 3.71 Show Notes

Overview

Conversation with Dr. Kirsten Bibbins-Domingo [1:09]

- **Introduction and background**
 - Dr. Bibbins-Domingo is a Professor of Epidemiology & Biostatistics at the UCSF School of Medicine
 - She is also the Vice Dean for Population Health and Health Equity in the UCSF School of Medicine

- **Vulnerable populations [18:33]**

- Dr. Bibbins-Domingo trained at San Francisco General Hospital as a medical student and resident
 - She points out that people often want to treat certain types of patients
 - For her, she was drawn to helping individuals where their life circumstance has created the obstacles to their health
 - There are also many questions in regard to the care for vulnerable populations, which provides a research incentive
- UCSF Center for Vulnerable Populations (CVP)



"The UCSF Center for Vulnerable Populations (CVP) at Zuckerberg San Francisco General Hospital and Trauma Center is dedicated to improving health and reducing disparities through discovery, innovation, policy, advocacy, and community partnerships. The CVP seeks to develop effective strategies to prevent and treat chronic diseases in communities most at risk."

- Values
 1. There is tremendous value in a *mission*

"You're not doing something for yourself, necessarily, you're doing something because that will help make the world a better place as you want that to be" - Dr. Prasad

2. Hard work pays off
3. Measuring what matters creates sustainable change (i.e., aligning incentives)

- **Changing Times [29:45]**

- Dr. Prasad points out that prior generations did not have the aim of living to be happy

- Instead, their focus was based on their *duty* and *responsibility*

"I think that in our short lives and our short careers, you have a duty to try to make it better for other people." - Dr. Prasad

- Dr. Bibbins-Domingo points out the importance of *purpose*
 - One weakness in the academy is that we don't do enough to help people understand how their purpose might align with a career in academic medicine
- **USPSTF [37:08]**
 - Dr. Bibbins-Domingo was the Vice Chair of the United States Preventive Services Task Force from 2014-2016
 - She served as chair from 2016-2017
 - There were two very tough decisions made while Dr. Bibbins-Domingo was affiliated with the USPSTF
 1. Prostate cancer screening



"In 2012, the USPSTF concluded that, although there are potential benefits of screening for prostate cancer, these benefits do not outweigh the expected harms enough to recommend routine screening (D recommendation). The change in recommendation grade is based in part on additional evidence that increased the USPSTF's certainty about the reductions in risk of dying of prostate cancer and risk of metastatic disease" - Source

- USPSTF now has a C recommendation for men aged 55-69
- 2. Breast cancer screening
 - a. USPSTF has a C recommendation for women aged 40-49 for breast cancer screening

- Once you deploy a screening test, people get comfortable with it, and it's very difficult to walk the intervention back from there
 - Dr. Bibbins-Domingo points out the challenge of communicating difficult decision which Dr. Prasad sympathizes with

"If our goal is to change, or to influence, the most number of people in a way that we think is compatible with what the science would tell us—it's our responsibility not just to understand and make the recommendation, but also to communicate it effectively" - Dr. Bibbins-Domingo

- **SARS-CoV-2 [54:28]**

- Excess mortality associated with the COVID-19 pandemic among Californians 18–65 years of age, by occupational sector and occupation: March through October 2020



"Though SARS-CoV-2 outbreaks have been documented in occupational settings and though there is speculation that essential workers face heightened risks for COVID-19, occupational differences in excess mortality have, to date, not been examined. Such information could point to opportunities for intervention, such as workplace modifications and prioritization of vaccine distribution." - Chen et al.

Table 3. Risk ratios for mortality, comparing pandemic time to non-pandemic time, among California residents 18–65 years of age, by occupation, March through October 2020.

Code	Description	Deaths ^a	Risk ratio
4020	Cooks	828	1.60
8800	Packaging and filling machine operators and tenders	172	1.59
6050	Miscellaneous agricultural workers	617	1.55
7800	Bakers	104	1.50
6260	Construction laborers	1,587	1.49
8965	Production workers, all other	452	1.46
8320	Sewing machine operators	127	1.44
5610	Shipping, receiving, and traffic clerks	146	1.44
4250	Grounds maintenance workers	712	1.40
5240	Customer service representatives	562	1.37
4000	Chefs and head cooks	532	1.35
1107	Computer occupations, all other	136	1.35
9600	Industrial truck and tractor operators	364	1.34
3500	Licensed practical and licensed vocational nurses	109	1.34
0410	Property, real estate, and community association managers	157	1.33
4230	Maids and housekeeping cleaners	378	1.33
3930	Security guards and gaming surveillance officers	707	1.32
9130	Driver/sales workers and truck drivers	1,962	1.32
9830	Military, rank not specified	111	1.32
9620	Laborers and freight, stock, and material movers, hand	2,550	1.31
5940	Office and administrative support workers, all other	123	1.30
7750	Miscellaneous assemblers and fabricators	354	1.29
2010	Social workers	217	1.28
4040	Bartenders	148	1.28
2540	Teacher assistants	183	1.28

^a Number of deaths in pandemic time. The table is restricted to occupations with 100 or more pandemic-time deaths.

Chen et al.

- This table got a lot of attention because it was presented during a time of debate whether or not restrictions should be relaxed
 - It also shows that vulnerable communities that are at a high-risk of COVID-19 are also susceptible when we are shut down
 - Reasons:
 - Closed environments
 - No sick leave
 - Managers not followings safety guidelines
- **Disparities [1:03:14]**
 - The thing that surprised Dr. Bibbins-Domingo the most was that we refused to shift our policy measures to *not* distribute resources equally in order to help

more vulnerable populations

- **Distinction between advocacy and science [1:07:43]**

- Although there are movements that scientists can advocate for, empiricism also plays an important role in making change
 - What is the balance between advocacy and empiricism?
 - Dr. Bibbins-Domingo is particularly driven to understand the health of communities that have long standing histories of oppression and of structural and social biases
 - Her research questions stem from this drive—but she is also willing to acknowledge that her particular solution to these problems may not be the right one

"I am going to be an advocate for improving health, and making sure that that's equitably distributed, but not always necessarily an advocate for a specific way of doing that unless I can really understand *how* to do that. And if I don't really understand *how* to do that, I need to be generating more *evidence* to help figure out if that's the right way" - Dr. Bibbins-Domingo

- Making real change is extremely difficult



"The Greek orator Demosthenes was said to treat his speech impediment by talking with pebbles in his mouth and shouting above the roar of the ocean waves." - [Source](#)

- The pebbles are the *science*

"You may have an intuition about how the world is unfair or unjust. Your intuition may, in fact, be right. But if you

want to make meaningful change, go out there and learn the best methods you can learn, be the best at it. So when you come and you show people why it's a problem, you documented it in the most systematic way possible with the most unimpeachable methods, you show them precisely why this is the determinants of what matters, and why your proposed solution will in fact, ameliorate the problem. And if you want to win the game, because you care deeply about advocacy, become a scientist" - Dr. Prasad

- **Leadership [1:20:50]**

- Dr. Bibbins-Domingo tries to maximize the talents around her to create long-lasting effective change
 - Creating an environment for people to thrive in is a priority

- **Other people mentioned:**

- Harold Eliot Varmus
- Robert M. Wachter
- Lee Goldman
- Andrew Bindman, MD
- Talmadge King Jr, MD

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