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**Gregory D. Zimet, Ph.D.**

# Understanding and Talking with Vaccine-Hesitant Patients

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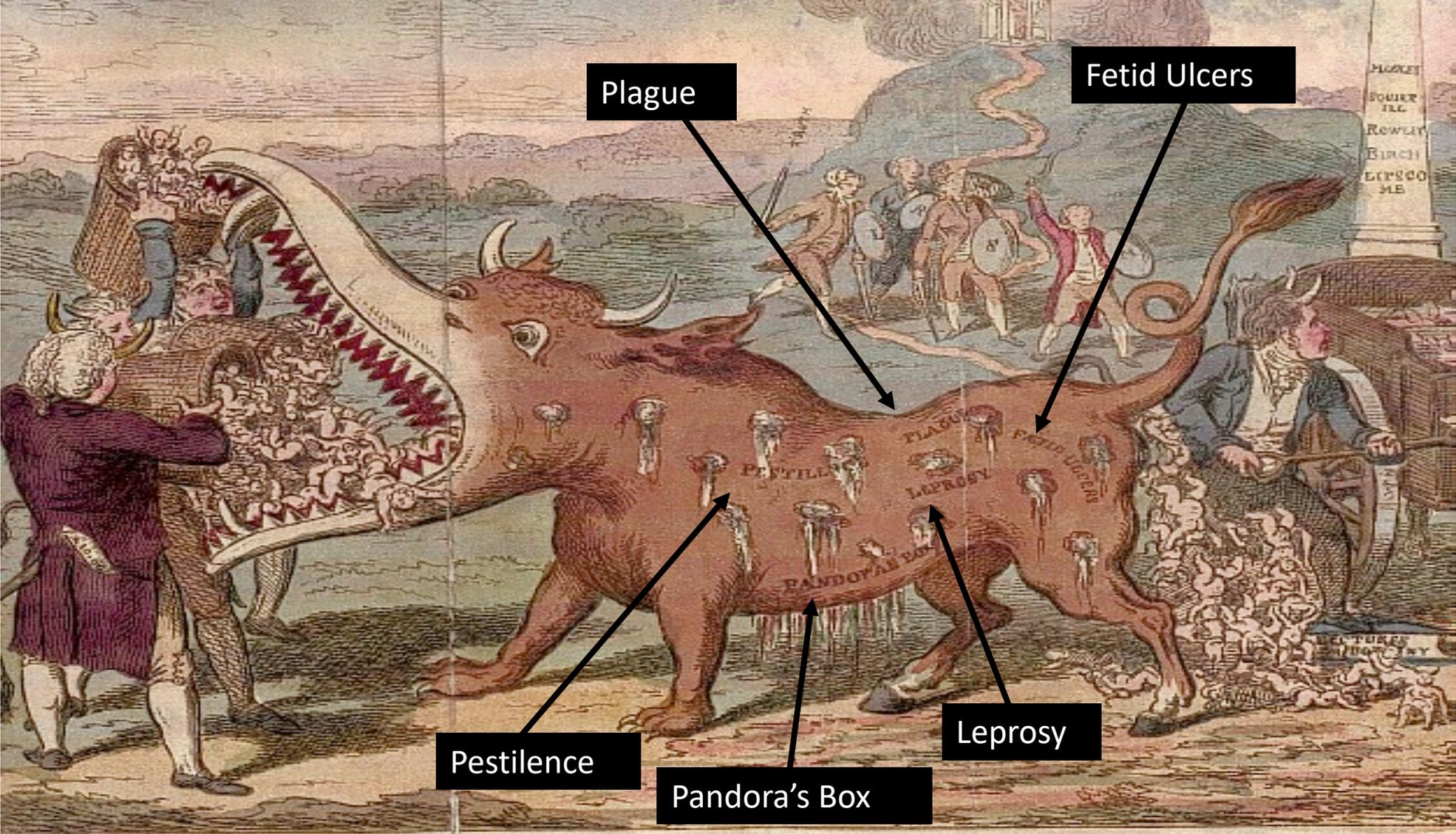
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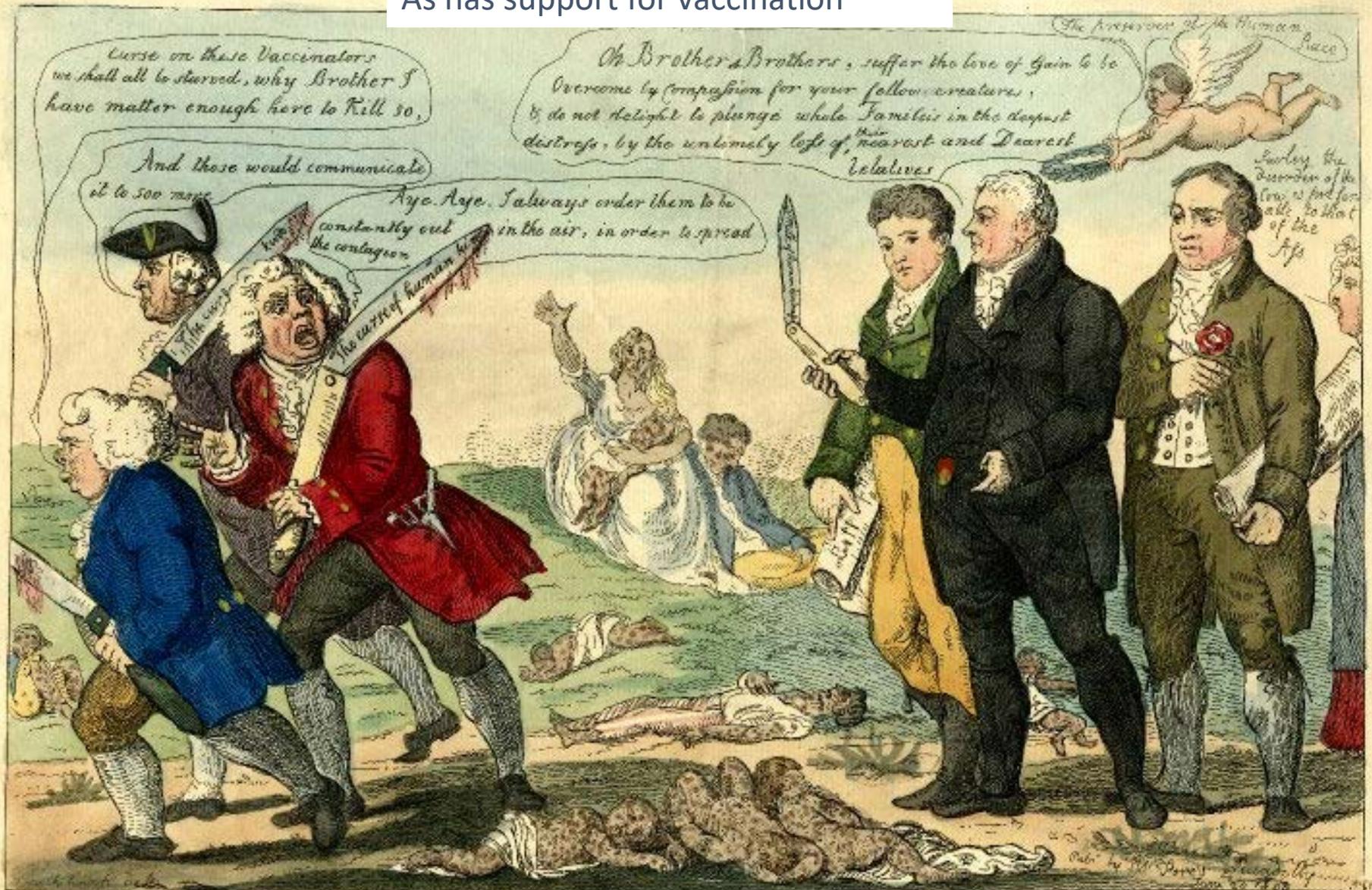
# Disclosures

- No conflicts over the past year with respect to private industry
- I am an investigator on NIH-funded grants related to HPV vaccination

Historically, implementing effective immunization policy has been a challenge



As has support for vaccination



VACCINATION against SMALL POX. Mercenary & Merciless spreaders of death & devastation driven out of Society!

Edward Jenner (pioneer of the smallpox vaccine) and his two colleagues seeing off three anti-vaccination opponents; the dead are littered at their feet. 1808.



The following dialogues were adapted from:

Dubovsky & Weissberg, “Clinical Psychiatry in Primary Care” (1986) &

Ed Marcuse (<http://ocw.uci.edu/courses/course.aspx?id=60> )

Also see:

[www2.aap.org/cisp/pediatricians/riskcommunicationvideos.html](http://www2.aap.org/cisp/pediatricians/riskcommunicationvideos.html)

# An unsuccessful approach to communicating with patients

You are due for your annual flu vaccine today.

You have nothing to worry about. We know the vaccine can't cause the flu.

You can't trust those websites. Good scientific research shows that flu vaccines are completely safe.

Well, but how would you feel if your granddaughter caught the flu from you and got really sick?

It's just really important that you get this today, okay?.

## Not so helpful

Directing style

“Righting reflex”

Failing to take cues

Jargon

Discrediting information source

Overstating vaccine safety

Confrontation

Emotional manipulation/coercion

I'm not interested in getting the flu vaccine. A friend of mine got the flu from it last year.

Well, I've seen research on the internet about the flu vaccine. They said it wasn't safe and had mercury in it.

I still feel uncomfortable about this vaccine.

I don't think that's fair, and anyway, she's very healthy.

It's my health and I'll make that decision!

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Well, but how would you feel if your grandpa had caught the flu from you and got really sick?

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- "Righting reflex"
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It's my health and I'll make that decision!

# An more successful approach to communicating with patients

You are due for your annual flu vaccine today.

What concerns do you have?

I understand that you want to do what is best for you; so do I. Many people feel bombarded with conflicting information and do not know whom to believe.

Can we take some time to talk about your questions about vaccine ingredients?  
Then, if you would like, I can give you some trustworthy information sources about vaccines.

## Helpful

Guiding style  
Care with body language  
**Eliciting concerns**  
**Asking permission to discuss**  
**Acknowledging/listening/empathy**  
Determining readiness for change  
Informing about benefits *and* risks  
**Giving appropriate resources**

I'm not interested in getting the flu vaccine. A friend of mine got the flu from it last year.

Well, I've seen research on the internet about the flu vaccine. They said it wasn't safe and had mercury in it.

From what I've seen on TV, I'm not sure I can trust the ingredients in vaccines. Science isn't always right.

OK. That sounds fair.

# An more successful approach to communicating with patients

You are due for your annual flu vaccine today.

**Eliciting Concerns**  
What concerns do you have?

**Listening / Acknowledging**  
I understand that you want to do what's best for you; so do I. Many people feel bombarded with conflicting information and do not know whom to believe.

**Empathy**  
Can we take some time to talk about your concerns about vaccine ingredients?  
**Asking Permission**  
Then, if you would like, I can give you some trustworthy information and resources about vaccines.  
**Appropriate Resources**

## Helpful

- Guiding style
- Care with body language
- Eliciting concerns**
- Asking permission to discuss**
- Acknowledging/listening/empathy**
- Determining readiness for change
- Informing about benefits *and* risks
- Giving appropriate resources**

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# Variations in Vaccination Attitudes



# All worried patients are not alike

- ▶ Patients worried about vaccines in general
  - ▶ Patients worried about specific vaccines (e.g., flu or HPV)
  - ▶ Patients who attribute medical or development problems to past vaccination
- 



# Concerned parents are *not* all alike

- ▶ Differ on vaccine behavior: Up-to-date, delaying, non-immunized
- ▶ Studies find differentiation in concerns and beliefs
  - Very worried
  - Fence-sitter
  - Fleeting concern
  - Vaccine-confident

Leask et al., BMC Pediatrics 2012;  
Keane et al., Vaccine 2005;  
Gust et al., Am J Health Behav 2005



# Health Care Provider (HCP) – Patient Communication



# Patients want to talk to their HCPs:

- ▶ HCP is most used source of information about immunization and most trusted source
- ▶ But, patients report problems with:
  - Content of discussions
  - Communication/interaction

Gellin et al., 2000; Gust et al., 2008; Davis et al., 2001



# HCP and patient may approach decision in very different ways:

- Different internal models of
  - Decision-making
  - How “risk” is experienced
- These models or cultures sometimes collide
- HCP-parent relationship is a possible bridge across the two cultures



# What does the HCP bring?

- ▶ HCP model of decision-making
  - Biomedical, focuses on scientific research about risks and benefits
  - Risk is communicated numerically
  - Decisions based on weighing consequences of possible choice alternatives



# What does the patient bring?

- ▶ Patient model of decision-making
  - Biomedical model of health and disease and/or...homeopathic model
  - More feeling-based
  - Factors in decision may include non-scientific, affect-driven issues (e.g., omission bias)



# What does the patient bring?

## ➤ Risk-as-feelings

- “To a lay person, risky events are ones that trigger worry, dread, or regret...”
- Risk may be experienced as “some versus none”
- A patient’s emotional reaction may strongly influence decisions

Loewenstein et al. Psychol Bull 2001;  
Slovic et al., Risk Analysis 2004;  
Chapman & Coups. Health Psychol 2006



# Fear and trust



- ▶ “It is hard to *unscare* someone” (Offit)
  - “Trust comes on foot but leaves on horseback” (Casiday, Soc Sci Med 2007)
- ▶ Degree of trust/mistrust in HCP may reflect trust in...
  - Government
  - Medicine and medical policy-making organizations
  - The “business of science”
  - Pharmaceuticals



## A word about perceived causation:

“Some argue, plausibly, that we evolved to see a single cause even where there is none, on the basis that it is better to be safe than sorry, better to identify that pattern in the trees as a tiger, better to run--far better-- than to assume that what we see is a “chance” effect of scattered light and shifting leaves in the breeze, creating an illusion of stripes.”

Blastland & Dilnot, “The Numbers Game” 2009



What Can Help



## Expression of Anti-Vaccine Sentiments or Hesitancy about Vaccination...

- ▶ Can provoke frustration and anger in the provider, which can lead to:
  - Rigid refusal to be “manipulated”
  - Overcompensating: “giving in” to patient’s demands
  - Avoidance of the patient; disengagement



What can help:

## Take concerns seriously

- Consider the patient as an individual
- Blanket statements of certainty/reassurance may feel like “brushoff”
- HCPs should spend the time needed to thoroughly understand patients’ concerns
  - Pre-screen for concerns while in waiting room
  - Schedule back for longer visit
  - Have staff person on call to address concerns

## What can help:

Accurate info is necessary,  
but not sufficient

- ▶ Don't assume patients understand vaccine mechanisms, immunity and herd immunity
  - Widespread lack of understanding
  - Personalized assessment of "vulnerabilities" may guide decision
- ▶ Scientific information reassures HCPs but not all patients

Downs et al., Vaccine 2008;  
Hilton et al., Vaccine 2006;  
Skea et al., Soc Sci Med 2008



## What can help: Support comprehension

- Help patients understand biomedical model of risk
  - Use natural frequencies
  - Avoid percentages
  - Avoid verbal probabilities (e.g., rare, likely, often)

Wroe et al., Health Psychol 2004

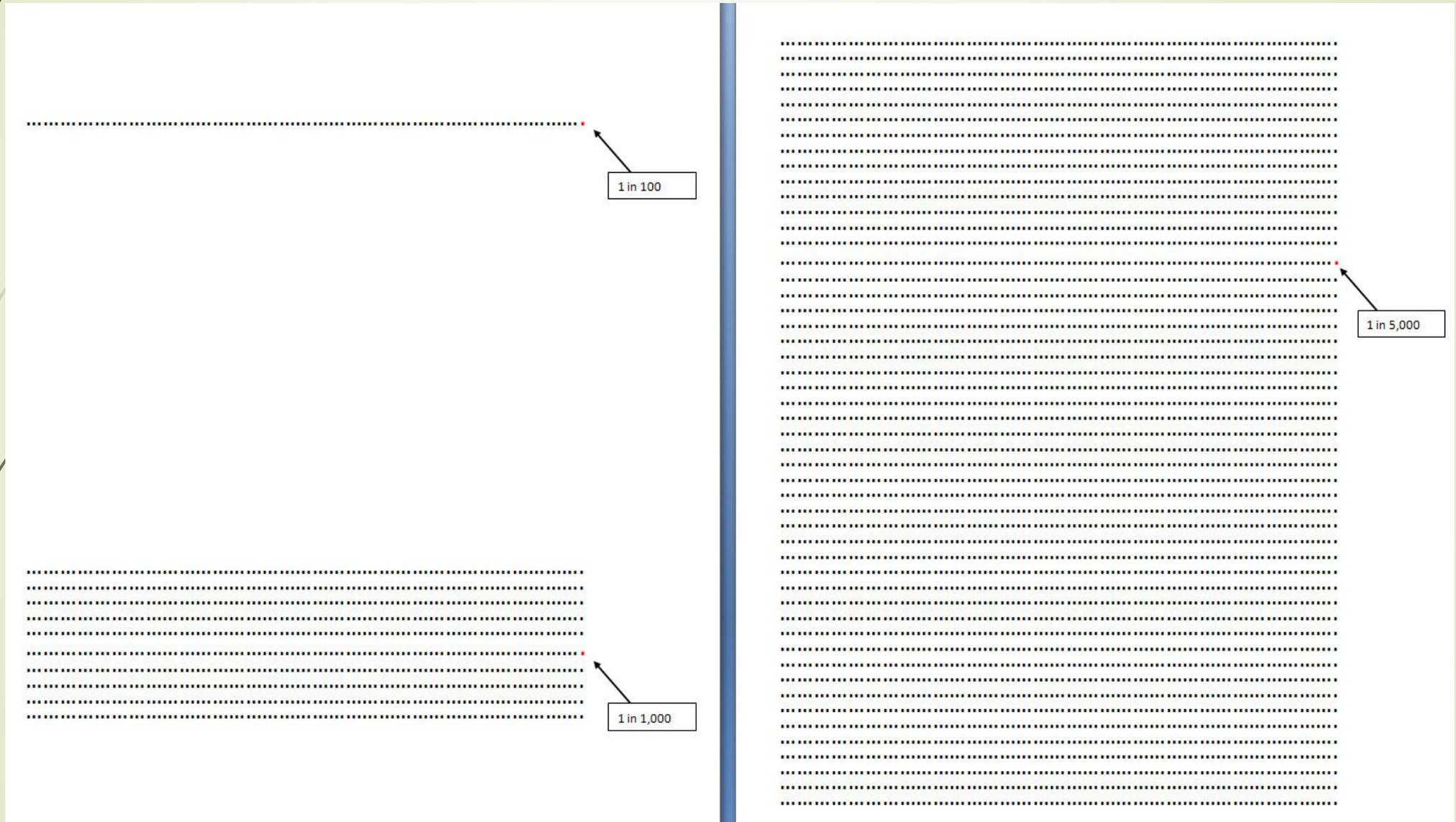


## What can help: Support understanding

- Use visual representations to help comprehension
  - One red dot in a field of 10,000 black dots
  - Arrays of stick figures, bar graphs
  - Graphic organizers alongside text

Kaplan et al., J Soc Behav Pers 1985;  
Kools et al., Pat Educ Counseling 2007;  
Blastland & Dilnot, "The Numbers Game" 2009

# Visual depiction of probabilities



## Some Facts About Cervical Cancer and the HPV Vaccine:

Girls who get the HPV vaccine are much less likely to get cervical cancer later in life.

Right now, there are 12 million American girls between the ages 11 and 16.

If NONE of these girls get the HPV vaccine, about 87,000 will get cervical cancer later in life. That's enough to fill a football stadium.

NO HPV VACCINE

**87,000**  
**GET CANCER**

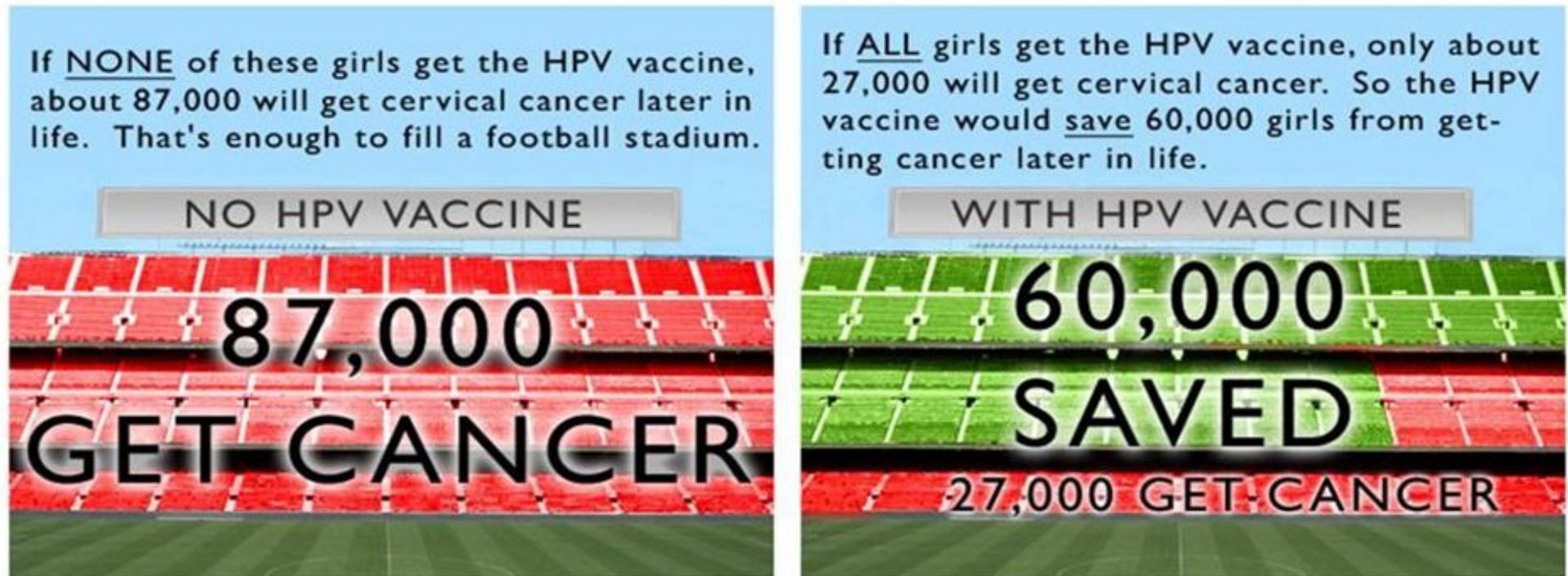
If ALL girls get the HPV vaccine, only about 27,000 will get cervical cancer. So the HPV vaccine would save 60,000 girls from getting cancer later in life.

WITH HPV VACCINE

**60,000**  
**SAVED**  
27,000 GET CANCER

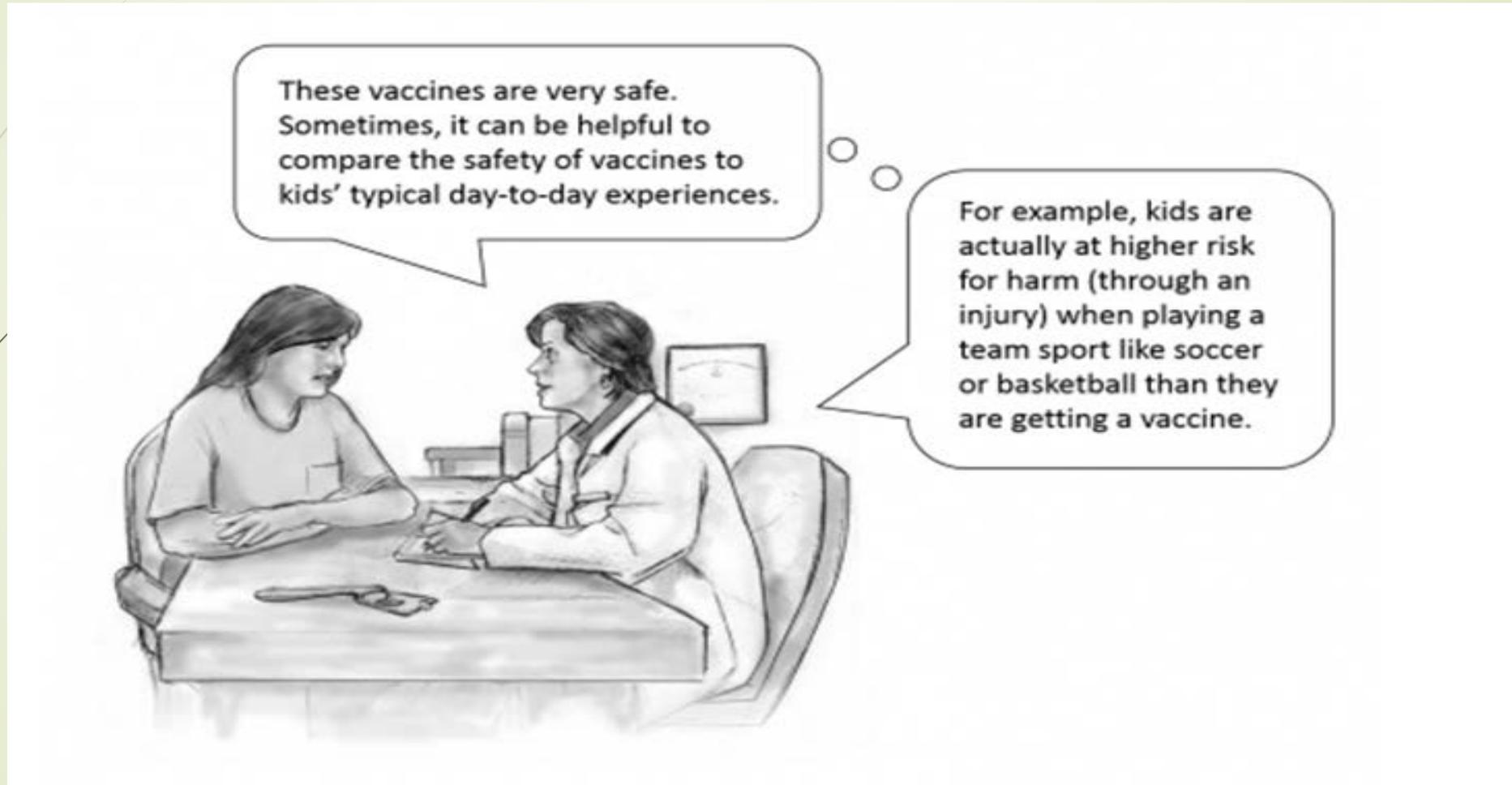
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From: Cox et al. *Health Psychology* 2010.

# Safety information: Compare to everyday experiences



\*From: Donahue et al. *Acad Pediatr* (in press).



# Community Immunity Simulations

- ▶ <http://www.theguardian.com/society/ng-interactive/2015/feb/05/-sp-watch-how-measles-outbreak-spreads-when-kids-get-vaccinated>
- ▶ <http://www.software3d.com/Home/Vax/Immunity.php>
- ▶ <http://fred.publichealth.pitt.edu/proj/measles/>



# More communication tips



## What can help: Communication tips

- Start with a presumptive recommendation, but be aware that:
- Strong persuasive techniques can be counterproductive and erode trust
  - Patients may focus on evidence that strengthens previously held views and discount evidence that does not fit with view
  - Be cautious in use of hypothetical situations that force patients into a rhetorical corner:
    - "how would you feel if...."

Betsch & Sachse, Health Psychol 2013;  
Sturm et al. Zero to Three 2010;  
Leask, NSW Pub Health Bull 2009



## What can help: Communication tips

- How you provide information is as important as what you say
    - Avoid “scientific ping-pong”
    - Consider patient’s readiness for change
    - Use strategies from motivational interviewing (Leask et al., *BMC Ped* 2012)
    - Chunking and checking (Leask et al., *BMC Ped* 2012)
    - Decision aids may be useful tools for particularly resistant parents
- 



What can help:

Know the current media coverage\*

- Familiarize yourself with:
  - ... what patients read
  - ... what patients watch
  - ... what websites patients access
  - ... what social media patients participate in

\*Betsch et al. Vaccine 2012.



# Summary

- Majority of patients do not require intensive intervention around vaccination
- For vaccine-hesitant patients, it is important to develop a decision-making partnership
  - Being an informed decision-maker is important to many patients
  - Reflects shift from paternalistic model to shared model of decision-making
  - Helps empower patients to make informed decision



# Video

- ▶ [https://www.youtube.com/watch?time\\_continue=1&v=ol1gnSaD\\_u8](https://www.youtube.com/watch?time_continue=1&v=ol1gnSaD_u8)
- ▶ The above YouTube link contains four segments (accepting parent, mildly hesitant parent, moderately hesitant parent and very hesitant parent). The moderately hesitant segment was played during the webinar.



# Resources

- ▶ Skills checklist for vaccine administration:  
<http://www.immunize.org/catg.d/p7010.pdf>
- ▶ Resources on adolescent vaccination, including the video just shown:  
<http://www.unity4teenvax.org/unity-projects/>
- ▶ Resources on adult immunization
  - ▶ <http://www.immunize.org/adult-vaccination/>
  - ▶ <https://www.cdc.gov/vaccines/hcp/adults/for-practice/index.html>
  - ▶ <http://www.vaccineinformation.org/adults/resources.asp>



# Questions?

- ▶ Thank you for attending our webinar today. Please take a few moments to fill out a brief evaluation that will help us improve our educational offerings in the future. You can find a link to the survey in the chat box.
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