



## The Vaccine Hesitancy Crisis: understanding and

addressing root causes

The Association of Women's Health, Obstetric and  
Neonatal Nurses (AWHONN) Conference

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Taylor Pinsent, MPH

## About Boost Oregon



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## Boost Projects

- Provider trainings and manuals
- Annual lecture for OHSU medical students
- Annual lecture for Public Health professionals
- Regular community talks and workshops
- Website with accurate, easy to understand information about childhood vaccines

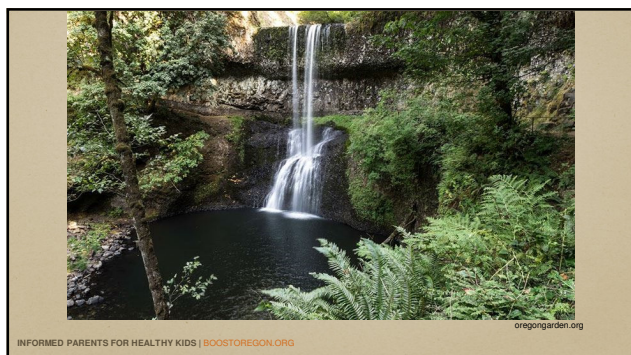
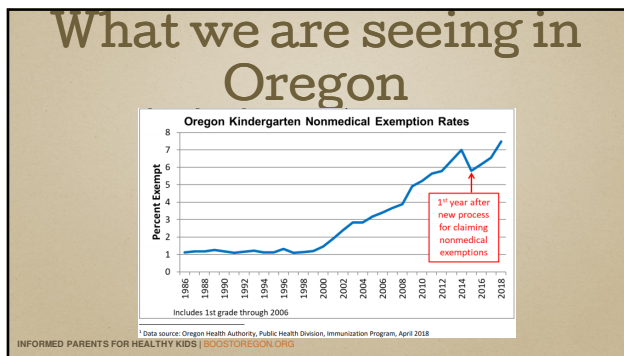
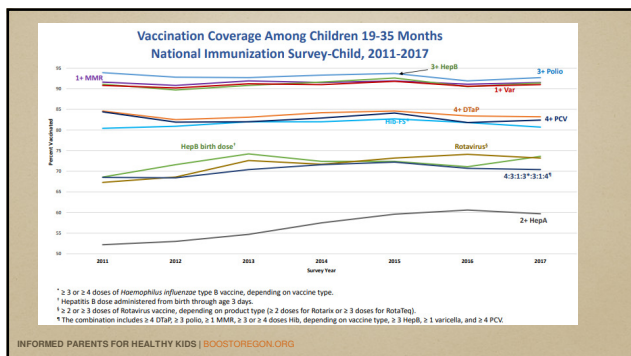
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Vaccine hesitancy – the reluctance or refusal to vaccinate despite the availability of vaccines – threatens to reverse progress made in tackling vaccine-preventable diseases. Vaccination is one of the most cost-effective ways of avoiding disease – it currently prevents 2-3 million deaths a year, and a further 1.5 million could be avoided if global coverage of vaccinations improved.

The reasons why people choose not to vaccinate are complex; a vaccines advisory group to WHO identified complacency, inconvenience in accessing vaccines, and lack of confidence are key reasons underlying hesitancy. Health workers, especially those in communities, remain the most trusted advisor and influencer of vaccination decisions, and they must be supported to provide trusted, credible information on vaccines.

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**Hesitant to vaccinate**  
Health professional perspective

- ❖ Frustrated and insulted that parents do not trust our medical judgment.
- ❖ Clinic time and resources.
- ❖ Worry about their children.

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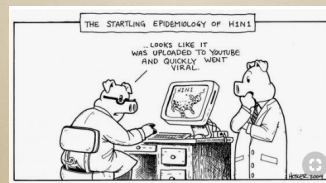
## Hesitant to vaccinate

### Hesitant parent perspective

- ❖ Powerful cognitive biases.
  - ❖ Negativity bias
- ❖ Clinic time and resources.
- ❖ Change in the medical model.
- ❖ Worry about their children.

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## Understanding why?



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## Epidemiology

### Vaccine hesitancy

- ❖ Mistrust in large corporations that manufacture vaccine and the government that purchases and promotes vaccines
- ❖ Inappropriate relationships between industry and the government
- ❖ Concerns that vaccine are not "natural"
- ❖ Autism "link"

Because @OHAOregon realizes there is #noemergency. Maybe they could ask their financing arm (@Merck) what to do.

Siddiqui, M., Salmon, D. A., & Omer, S. B. (2013). Epidemiology of vaccine hesitancy in the United States. *Human vaccines & immunotherapeutics*, 9(12), 2643–2648. doi:10.4161/hv.27243

## Rooted Deep

### Moral Foundations Theory

- |                         |                       |
|-------------------------|-----------------------|
| 1. Care/harm            | 4. Liberty/oppression |
| 2. Authority/subversion | 5. Purity/degradation |
| 3. Loyalty/betrayal     | 6. Fairness/cheating  |

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## Association of moral values with vaccine hesitancy

### Moral Foundations Theory

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## Unintended Consequences

If #vaccines are so "safe", why won't MD's participate in debates with the #informedchoice crowd? Oh wait, only 50% of doctors are vaccinated themselves. #lightbulb #notoHB3063

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## Stressing Valid Arguments

"The more you reiterate your valid argument and its conclusion, the more defensive they will become and the more they will advance reasons for why they cannot possibly do what you have argued that they should do" (p.64)

Motivational Interviewing for Healthcare Professionals by B. Berger and Wm Villaume, APhA Press, 2013

## Public Health Are we doing the best we can?

- ❖ What information can be safely provided?
- ❖ What are we doing to correct misinformation?
- ❖ What platforms are we using to reach families?

Also wondering where I can find information regarding the genotype for each case? Thanks for the help.

Because genotype info is still being gathered as part of an ongoing outbreak investigation, we are unable to share this information for cases of measles. However, we can say that regardless of the genotype, the measles vaccine is very effective.

## Medical Providers Are we doing the best we can?

"One powerful finding from responses by caregivers with partial and un-immunized children was that they did not complete their children's vaccinations because of **negative experiences from the previous health care services. Those who had a previous bad experience with one child would not take a new child for vaccination. A few mothers claimed that they were shocked at the tone health workers used to address them. They were shouted at when they came late or if they had lost their ... [child health book]. They were afraid to take their children in if they had missed an appointment. They would rather avoid going back than face the verbal interrogation.**"

Understanding the socio-cultural dynamics of urban communities and health system factors influencing childhood immunization in Dili, Timor-Leste. Dili: Imunizasaun Proteje Labarik; 2012: p.16 ([http://pdf.usaid.gov/pdf\\_docs/PADO1NR2.pdf](http://pdf.usaid.gov/pdf_docs/PADO1NR2.pdf), accessed 13 April 2019).

The bottom line: you've read a lot more of the research, know the statistics better...but if that knowledge and your professional experience leads you to roll your eyes at concerned parents instead of proving to them that you're their child's advocate too, then you yourselves are unwittingly contributory factors to the decline in vaccination rates right along with those parents who are searching for the right thing to do for their children.  
Richard, November 29, 2010

Seattle Mama Doc™

A blog by Dr. Wendy Sue Swanson.  
A mom, a pediatrician, and her insights about keeping your kids healthy.

## Unconscious and unintended consequences

### \*Health professional\*

Cognitive bias (Wishful thinking bias, confirmation bias)

Stereotype: belief about an attribute about a group and its members

Prejudice: negative prejudgment of a group and its members

Discrimination: negative behavior towards a group or its members

March 22, 2019  
— Ray Andrew

I am writing into increasing numbers of patients/parents who decline to receive vaccinations. I don't call them "anti-vaxers" because that is the most immature way I can imagine to refer to another human being with an opinion, whether I consider it informed or not. Name-calling is what people do in politics when they don't have an intelligent response to an opposing party's argument or viewpoint. This is supposed to be science, not politics.

Based on my experience, those who choose not to vaccinate care just as much about their children as you and I do. But they are looking for information. They no longer consider the AAP and the CDC as unbiased sources of information because the former has ties to the drug industry and the latter actually owns vaccine patents. These parents want me to show them long-term safety studies, which I am unable to find. They are bothered by the ingredient lists of vaccines, knowing that there

Please examine the evidence for yourself. If you have any questions, speak with your pediatrician.

### Studies About General Safety & Number of Vaccines

Study	Summary	Author Conclusion
<b>Association Between Estimated Cumulative Vaccine Antigen Exposure Through the First 23 Months of Life and Non-Vaccine Targeted Infections From 24 Through 47 Months of Age</b>  Glanz J, et al. JAMA. 2018; 319(9):906-913.	Authors looked at whether there was a connection between acquiring an infection that is not targeted by vaccines (meaning there is no vaccine to prevent this illness) and exposure to antigens through vaccines. Nine hundred ninety-four children were studied from age 24 months to age 47	There is no significant correlation between exposure to antigens through vaccines and risk of developing a non-vaccine targeted infection.

<https://www.healthychildren.org/english/safety-prevention/immunizations/pages/vaccine-studies-examine-the-evidence.aspx>

### Unconscious and unintended consequences \*Parents\*

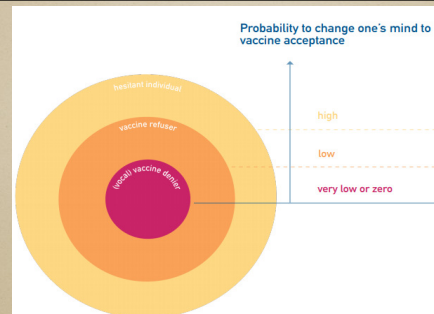
- ❖ Cognitive bias and negativity bias (workshop)
- ❖ Confirmation Bias: we unconsciously seek out evidence to confirm what we believe is true.
- ❖ Narrative bias: refers to our tendency to make sense of the world through stories
- ❖ Commitment confirmation: tendency to become attached to a particular point of view even when it may be obviously wrong.

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## Addressing Parental Concerns

Various ways to respond effectively to parents

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Best practice guidance //

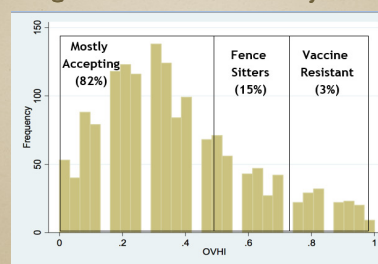
## How to respond to vocal vaccine deniers in public



[http://www.euro.who.int/\\_data/assets/pdf\\_file/0005/315761/Best-practice-guidance-respond-vocal-vaccine-deniers-public.pdf](http://www.euro.who.int/_data/assets/pdf_file/0005/315761/Best-practice-guidance-respond-vocal-vaccine-deniers-public.pdf)

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## Oregon Vaccine Hesitancy Index



Oregon Parental Exemption Survey, 06, (N=1,592) Steve Robison, et. Al., personal communication

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## CDC Longitudinal Survey of First Time Expectant Moms

- Over 85% of respondents had already made a plan for vaccinating their baby by their 2nd trimester.
- Internet search engines were their #1 source of information about childhood vaccines.
- 63.5% said their ob-gyn had not given them any info about childhood vaccinations.
- Only 36.5% were satisfied/very satisfied with their current level of knowledge of childhood vaccines.

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## Vaccine decisions being made during pregnancy

- Results suggest a need for midwives and ob-gyns to
  - direct expectant women to credible sources of childhood immunization information.
  - encourage them to meet with a pediatrician during pregnancy

[www.cdc.gov/vaccines/pregnancy](http://www.cdc.gov/vaccines/pregnancy)

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## De-biasing

- ❖ Education: awareness and mindfulness
- ❖ Exposure: contact, environment, exemplars
- ❖ Approach: higher level processing, reduced cognitive load, checklists, organizational changes

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## Motivational Interviewing

- 4 pillars of Motivational Interviewing
  - Resist the righting reflex
  - Understand and explore the patient's own motivation
  - Listen with empathy
  - Empower the patient

## Communication Guidelines

1. Be your authentic self
2. Assume good intentions
3. Be curious and open to discovery
4. Ask for clarification if needed
5. Listen to understand
6. Acknowledge and accept difference
7. Be mindful of identity and power
8. Move in and out--hear all voices
9. Be present. Stay engaged.
10. **Be open to non-closure**

## Talking with Parents

- ❖ Establish a mutual understanding
- ❖ Discuss goals and values related to vaccines
- ❖ Communicate how vaccines help them accomplish those goals and align with those values.

PostEverything • Perspective

**How do you get anti-vaxxers to vaccinate their kids? Talk to them — for hours.**

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## Talking with Parents

- ❖ Use a presumptive approach. Some studies suggest that this results in higher vaccine acceptance rates. (EX: your daughter is going to get three shots today.)
- ❖ Listen to and respond to parents' questions.
  - Assess the level of information that a parent wants--some only want the basics, while others want to go in-depth.
- ❖ Give your strong recommendation. EX: I strongly recommend your daughter get these vaccines today.

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## Talking to parents

- ❖ Acknowledge both the benefits and risks of vaccination--parents want to know about side effects.
- ❖ Use a mix of science and personal anecdotes--the right mix will depend on the parent.
- ❖ Respect a parents desire to work in partnership with you.
- ❖ Keep the conversation going--even if a parent chooses not to vaccinate that day.
- ❖ Document questions and concerns for future conversations.
- ❖ If a parent expresses extreme worry or doubt, follow-up with a phone call or email.

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We want parents to feel good about choosing to vaccinate their children because they believe it's the right decision, not because they are frightened into doing so.

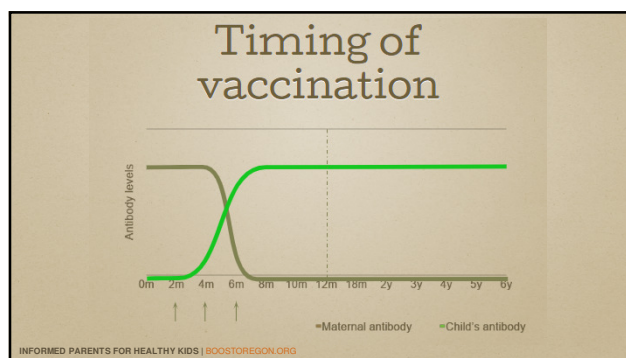
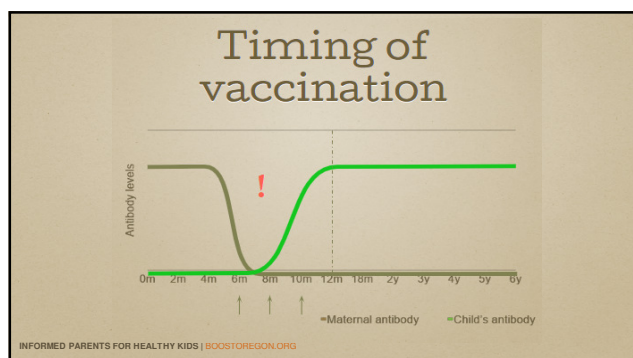
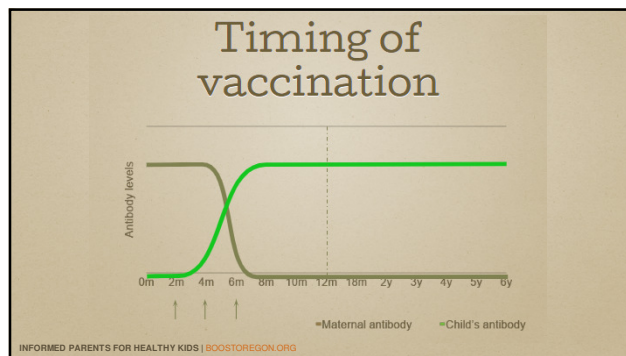
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## Community Workshops

- ❖ How profitable are vaccines?
- ❖ How do vaccines work?
- ❖ Timing of vaccinations
- ❖ The power of perception
- ❖ Negativity bias
- ❖ Vaccine specific ingredients
- ❖ Correlation vs causation
- ❖ Cherry picking

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# Timing of vaccinations



## Negativity bias

## Correlation vs causation

### The big picture: community

"Vaccination works better as a community effort than a personal shield"-Dr. Joel

Thank you!

Taylor.jonespinsent@gmail.com

## Resources

- [www.who.int/immunization/programmes\\_systems/vaccine\\_hesitancy/en/](http://www.who.int/immunization/programmes_systems/vaccine_hesitancy/en/)
- [www.healthychildren.org/english/safety-prevention/immunizations/pages/vaccine-studies-examine-the-evidence.aspx](http://www.healthychildren.org/english/safety-prevention/immunizations/pages/vaccine-studies-examine-the-evidence.aspx)
- [www.cdc.gov](http://www.cdc.gov)
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