Difficult Discussions

Conversations on Vaccine Refusal and Skepticism

Matthew Gibson, MD, FAAP

Disclosures

- Not a pharmaceutical shill
- Unaware of any deep state conspiracy
- All for secret nano-bot injections but alas unaware of any such plans

Who Has Encountered Vaccine Hesitancy or Refusal?

Where Are We?

- 70.7% immunization for 19-35mo!
  - DTaP - 83%
  - Polio - 92%
  - MMR - 91%
  - Hib - 82%
  - Hep B - 90%
  - Varicella - 91%
  - PCV - 82%

TERRIBLE

- Most from missed well visits
- Some from hesitancy
- Less from refusal

Vaccine Refusal

- 2.5% in 2010
- 4% in 2013

- Vocal Social Media = More Misinformation
  - Celebrities
  - Politicians
  - "Physicians"
Vaccine Hesitancy

- 19% in 2000
- 50% in 2010

“Absent training and experience...it’s hard to be fully informed. It's also painfully easy to be fully misinformed.”

Why Is This Important?

Impact of Hesitancy and Refusal

- Health Risk
- Financial Impact
- Health System Impact

Financial Impact

- “Vaccines are among the most successful and cost-effective public health tools for preventing diseases and death.”
- Impact of vaccines can be measured not just in terms of public health, but also economic terms:
  - Reducing healthcare costs
  - Decreasing lost labor force productivity
  - Contributing to social and economic development

Colorado

- 2015: total charges for vaccine preventable diseases was over $35M.
  - $29M in flu costs
  - ~8M in PCV
  - $600K for ONE case of tetanus
Impact on Health System and Providers

- Increase burnout
- Time sink in office
- Destroys Our Souls

How Do We Fix This?

Education!

- How Immunizations Work
- Safety and Testing
- Schedule and Reasoning
- Public Health Benefits

Evidence Based Wrongness

- Randomized Trial with four interventions + control
  - Info about lack of evidence between MMR and Autism
  - Information about MMR (from VIS)
  - Images of afflicted children
  - Narrative about severe measles

Evidence Based Wrongly Wrong Wrongness

- Randomized Trial with four interventions + control
  - Info about lack of evidence between MMR and Autism
  - Reduced misinformation overall but decreased intent to vaccinate among those most worried
  - Information about MMR (from VIS)
  - No change in decision making
  - Images of afflicted children
  - Increased belief of links between adverse effects/autism and immunizing
  - Narrative about severe measles
  - Increased belief in serious vaccine side effects
Education

- Don’t disregard facts, but this is one scenario where the truth will not set you free.

What’s the Answer?
Why do people doubt?
Why do they not immunize?

Humans

There is no information deficit.
We are not rational creatures.

We are emotional creatures.

Reasons People Can Be Terrible

- Misattributing Risk
- Celebrity Confusion
- Real/Fake Experts
- Cause and Effect
- Religion
- Fear Over Reason
- Social Media
- Politics

Sunk Costs

“The more costly a decision in terms of time, money, effort, or inconvenience, and the more irrevocable its consequences, the greater the dissonance and the greater the need to reduce it by overemphasizing the good things about the choice made.”

Being anti-vaccine becomes an identity.
It’s hard to reverse.

Shoot the Messenger

- Physicians are poor marketers because the nature of science and medicine is not conducive to clear, concise messaging.
What Actually Works?
- Presumptive Recommendations
- Broad/Blanket Recommendations
- Motivational Interviewing
- Fight Myths

Presume
- Suppose the vaccines are happening.

Blanket Recommendations
- Every vaccine is the same.

Motivational Interviewing
- Just like smoking
  - Empathy
  - Collaboration
  - Question/Evocation
  - Support/Autonomy

Myths
- Counteract.
- Refute.
- Confront the facts not the person.

Summary
- Vaccine refusal/hesitancy is a present and growing problem.
- Parental concerns are irrational and emotional (because that’s what most all human concerns are!)
- Give clear, short, strong, presumptive recommendations.
- Do not try to confront people, but instead assess and interview.
- Clearly refute myths and false facts.
Questions?

Sources
- CDC Immunization Fast Facts
- Offit, Paul. Bad Advice. 2018
- Tavris, Carol and Aronson, Elliot. Mistakes Were Made, but Not By Me. 2015.