Vaccine Hesitancy

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Three Parent Groups

1. Believers/advocates
   - Benefit outweighs risks
   - On-time and complete
   - Trust PCP and public health
2. Conflicted
   - Benefits may not outweigh risk
   - Delay or Cherry pick
   - Want to trust, but unsure
3. Nonbelievers/antagonists
   - Risks outweigh benefits
   - Refuse or sometimes delay
   - Do not and will not trust medical or public health individuals or entities

Hybrid Groups

- Libertarian
  - May believe in vaccines or not
  - Object to mandates
  - More likely to believe anecdotes on risks
- Religious
  - Muslims
    - Pork products in vaccine manufacture
    - Suspicion Western plot, Subvert God’s will
  - Christian Scientists, Dutch Reform
    - Part of dogma of faith
    - Refuse all vaccines

Provider Groups

- Enthusiastic immunizers
  - Benefits outweigh risks
  - Trust science and public health entities
- Neutral Immunizers
  - Benefits outweigh risks
  - Unsure all vaccines needed
    - Younger more often than older providers
- “Alternative” immunizers
  - Too many vaccine and too compact schedule
  - Some benefits outweigh risk for some vaccines
  - Natural immunity preferred
Vaccine Hesitancy

Providers
- Conversations
  - Taking more and more time
- Media noise/confusion
- Emotional battles
- Fighting with science
- Challenging interactions
  - Feel unprepared for

Hesitant Parents
- Higher income
  - Educated demographic
- Active researchers
  - Online and peers
- Perceive bias of providers
- Distrust of pharma
  - Extending to physicians
- Public Health
  - “not for them”

Parent Focus Groups – July 2010
- Details:
  - 5 focus groups in Spokane/Seattle
  - 30 moms of ≤2 yo who do vaccinate
  - Primarily upper income and higher education
- Findings:
  - Low disease knowledge
  - Assumption - problem is “people not like them”
- Parent Recommendations:
  - Education needed on non-confrontational actions
  - Immunization is a social responsibility
  - Importance of respecting parent choice

Media Coverage of “firing”
- Discharge families refusing immunizations
- Pro arguments
  - Promotes safety of reception rooms
  - Forces parents to decide if current PCP advice outweighs other information source
  - Trust issue between provider and family
  - Helps maintain herd immunity
- Con
  - AAP statement: maintain such families
  - May have no reasonable other provider
  - May end up in substandard care
  - Does not respect parental choice

District VI AAP Survey
- Co-investigators
  - Jackie Bartlett, Nancy Neilan, Tom Tryon
- On line survey
  - Attitudes and approaches
  - 9 US states in District VI
  - ~20% responses
  - Variable response rate by state
  - Some Results
Take Home Message

- Vaccine hesitancy not uncommon
  - MN, ILL the most; IA and Dakotas the least
  - MMR, HPV and influenza vaccine reported as most frequently refused
- Vax refusal most often for fear of:
  - Autism, # of shots, severe adverse effect
  - Unfounded, based on misinformation
- Pediatricians remain engaged
- Refusal: IA, ND, SD less tolerance, most tolerated in MN

Where To Start

Evaluate whether the child has a valid contraindication to a vaccine by asking about medical history, allergies, and previous experiences.

Assess the parent’s reasons for wanting to delay or forgo vaccination in a non-confrontational manner. (Have they had a bad experience? Obtained troubling information? Do they have religious or philosophical reservations?)
Second Steps

If parents have safety concerns or misconceptions about vaccination ask them to identify the source(s) of those concerns or beliefs.

Listen carefully, paraphrase to the parent what they have told you, and ask them if you have correctly interpreted what they have said.

What Can Be Difficult

Provide factual information in understandable language that addresses the specific concerns or misconceptions the parent has about vaccination.

Example of Hard Question

- During outbreaks why does it often seem that most reported disease cases happen in vaccinated people?
  1. Does not mean that vaccines don’t work
  2. Usually vaccinated : unvaccinated >1:5
  3. No vaccine 100% effective
     - So breakthroughs occur
  4. The key is not comparing absolute number of cases in each group, but what % of vaccinated get disease vs % of unvaccinated

Numbers vs Percents

- 84 mumps cases among 25,000 people
  - 38 unvaccinated cases, 46 vaccinated cases
- 85% of population immunized
  - .85 X 25,000 = 21,250 immunized
  - .15 X 25,000 = 3,750 non-immunized
- 38/3,750 = 10.1 / 1,000 in unvaccinated
- 47/21,250 = 2.1 / 1,000 in vaccinated
- 4.8 higher risk if unvaccinated (79% efficacy)
- If all unvaccinated, predicts 247 cases

Not Just the Case Numbers

Goals

- Bolster believer/advocate families
- Best time use = conflicted families
  - Nonjudgmental, non-emotional, respectful advice
  - Define real concerns and their info source
  - Remain empathetic
  - Provide factual evidence of benefits and risks
- Families with the best information should make the best decisions
Other Resources

2. NNii’s: Common Questions about Vaccine Effectiveness.
   http://www.immunizationinfo.org/assets/files/pdfs/4_VAC_E.pdf
3. Why It’s Important to Monitor Vaccine Safety
   http://www.cdc.gov/vaccinesafety/Vaccine_Monitoring/Index.html

Other Resources 2

4. Natural Infection vs. Immunization. Paul Offit MD
   http://www.chop.edu/service/vaccine-education-center/hot-topics/natural-infection-vs-immunization.html
5. NNii’s: Exposure Parties
   http://www.immunizationinfo.org/exposure_parties.cfm
6. The Problem With Dr Bob’s Alternative Vaccine Schedule. P Offit and C Moser
7. Panel Hearing report from the U.K.’s General Medical Council regarding Dr. Andrew Wakefield
8. The Lancet retraction
   http://www.lancet.com/journals/lancet/article/PIIS0140-6736(10)60175-7/fulltext