Vaccine hesitancy in the Pediatric Office

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I have no potential conflicts of interest or financial disclosures to make.
Goals

- Define what Vaccine hesitancy is and who comprises the group
- Understand that many vaccine hesitant families do eventually vaccinate
- Discuss reasons behind hesitancy
- Discuss methods for approaching vaccine hesitant families
- Review AAP discussion on dismissal from practices for patients who refuse vaccines.
Finding the middle ground between pro and anti

World Health Organization defines vaccine hesitancy as “a behavior, influenced by a number of factors including issues of confidence (do not trust a vaccine or a provider), complacency (do not perceive a need for a vaccine or do not value the vaccine), and convenience (access)”. 

The AAP recommends that pediatricians continue to engage with vaccine-hesitant parents, provide other health care services to their children, and attempt to modify their opposition to vaccines.
Parents you have met

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunization advocate 33%</td>
<td>Parents agree that vaccines are necessary and safe. Parents have a strong relationship with their health care provider.</td>
</tr>
<tr>
<td>Go along to get along 26%</td>
<td>Parents do not question vaccines, would like to vaccinate their children, but may lack a detailed knowledge of vaccines.</td>
</tr>
<tr>
<td>Cautious acceptor/Health Advocate 25%</td>
<td>Parents may have minor concerns about vaccines but ultimately vaccinate their children.</td>
</tr>
<tr>
<td>Fence-sitter 13%</td>
<td>Parents have significant concerns about vaccines and tend to be knowledgeable about vaccines. Parents may vaccinate their child or may refuse or delay vaccines. Parents may have significant concerns about vaccines and may have a neutral relationship with their health care provider.</td>
</tr>
<tr>
<td>Refuser 3%</td>
<td>Parents refuse all vaccines for their child. Their reasons for refusal may include distrust in the medical system, safety concerns, and religious beliefs.</td>
</tr>
</tbody>
</table>

Adapted from: Gust, et al. American Journal of Health Behavior, 2005
An AAP survey in 2006 revealed that 75% of pediatricians had encountered parents who refused a vaccine.

Same Survey in 2013 revealed that this figure had increased to 87% of pediatricians.

According to the survey, pediatricians stated that the proportion of parents who refused 1 or more vaccines increased from 9.1% to 16.7% during the 7-year interval between surveys.
Patience my young Jedi

- Take the time to find out where the family is
- Listen to their concerns
- Ask about any specific negative experiences that they themselves have had in the past
- Try not to overestimate parental vaccine hesitancy or mistake a simple lack of knowledge for hesitancy or opposition
- Most parents need and want education about the best way to provide care for their children, including vaccinations
- BE PREPARED
Vaccine safety

Too many vaccines

Autism

Vaccine additives (thimerosal, aluminum)

Overload the immune system

Serious adverse reactions

Vaccine safety

Too many vaccines

Potential for long-term adverse events

May make the child sick

Vaccines do not work

Not all vaccines are needed

Ethical, moral, or religious reasons

Vaccine-preventable diseases have disappeared

Disease is more “natural” than vaccine

Inadequate research performed before licensure

PAIN

Parents know what’s best for their child

Freedom of choice

Parents have the right to choose whether to immunize their child

Do not trust organized medicine, public health

Do not trust government health authorities

Do not trust pharmaceutical companies

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Take the time to address concerns individually

HPV and my girl!

- Within 6 years of vaccine introduction, there was a 64% decrease in 4vHPV type prevalence among females aged 14 to 19 years and a 34% decrease among those aged 20 to 24 years.
- There is no evidence that HPV vaccine leads to sexual activity, infertility, lupus etc.

Aluminum

- Aluminum is present in small quantities and is necessary for a robust immune response
- It is safe!
- And OBTW none of the single dose vaccines available today for children contain thimerosal

PAIN

- Discuss ways your office can limit pain
- Breast feeding during vaccination, sucrose
- Topical anesthetics, cooling, vibration, distraction
- And of course rewards
Concerned about formaldehyde in vaccines? Consider the pear...

A 200 g pear contains up to 12,000 μg of formaldehyde, naturally.

Vaccines contain up to 100 μg, or 0.83% of the formaldehyde in a pear.

The amount of formaldehyde in a vaccine is so tiny that it doesn't even affect the naturally occurring levels of formaldehyde in a child's blood.

Source: http://tinyurl.com/foodCH20

Refutations to Anti-Vaccine Memes
In 2005, the Pontifical Academy for Life released a study titled "Moral Reflections on Vaccines Prepared From Cells Derived From Aborted Human Fetuses" to assist those struggling with the moral implications of getting such vaccines.

The use of such vaccines, it said, carries out "a form of very remote mediate material cooperation" with evil, however practicing Catholics are permitted to use the vaccines, it said, in the absence of ethical alternatives.

The academy said Catholics have a responsibility to push for the creation of morally just, alternative vaccines, but it also said they should not to sacrifice the common good of public health and the well-being of young children and pregnant women because there is no substitute.
<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Proteins</th>
<th>Vaccine</th>
<th>Proteins</th>
<th>Vaccine</th>
<th>Proteins</th>
<th>Vaccine</th>
<th>Proteins and Polysaccharides</th>
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<tbody>
<tr>
<td>Smallpox</td>
<td>~200</td>
<td>Smallpox</td>
<td>~200</td>
<td>Diphtheria</td>
<td>1</td>
<td>Diphtheria</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>~200</td>
<td>Diphtheria</td>
<td>1</td>
<td>Tetanus</td>
<td>1</td>
<td>Tetanus</td>
<td>1</td>
</tr>
<tr>
<td>Tetanus</td>
<td>1</td>
<td>WC-pertussis</td>
<td>~3000</td>
<td>AC-pertussis</td>
<td>2–5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WC-pertussis</td>
<td>~3000</td>
<td>Polio</td>
<td>15</td>
<td>Polio</td>
<td>15</td>
<td></td>
<td></td>
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<tr>
<td>Polio</td>
<td>15</td>
<td>Measles</td>
<td>10</td>
<td>Measles</td>
<td>10</td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td>~3217</td>
<td>Mumps</td>
<td>9</td>
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<td>9</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Rubella</td>
<td>5</td>
<td>Rubella</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>Total</td>
<td>~3041</td>
<td>Hib</td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Varicella</td>
<td>69</td>
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<td></td>
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<td></td>
<td></td>
<td>Pneumococcus</td>
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<td></td>
<td></td>
<td>Hepatitis B</td>
<td>1</td>
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<td></td>
<td></td>
<td>Total</td>
<td>123–126</td>
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</table>
Too many too soon?

The average playground is more challenging to your child's immune system than the entire vaccination schedule.
A 2011 study by Kempe et al demonstrated that physicians reported the greatest success convincing skeptical parents using messages that relied on their personal choices and experiences.

Physicians relating that they have immunized all of their children, their grandchildren, or themselves provide a compelling message that they are confident in the safety of the vaccines.

Keep the conversation going. “We talked last time about vaccines and you mentioned that you were concerned about the preservatives. Did you have a chance to look at some of the website/ handouts I gave you?”

Use the trust you have earned.
Pediatricians who provide a "presumptive recommendation" rather than a "participatory recommendation" – asking what the parent thought about shots, are more likely to see parents accept vaccines.

- “Lilac is due for her MMR and Varicella vaccine today. That will bring her up to date for quite a while!” vs. “What do you think about an MMR and a Varicella today?”
- “Lets get our flu vaccines today!” vs. “Do you want to do your flu vaccine now or next week?”
Unify your message

> Vaccine culture starts with your front desk and involves your entire office.

> Front desk:

  > “It’s important to get that flu shot done. Let’s see when we can get you scheduled!”

> Nursing: Rather than “you can discuss that (insert hesitancy) with the doctor when they come in…”

  > Try “Dr. Mulder has a great resource that talks about that.”
  
  > Or “Dr. Mulder can tell you more about that in particular but these vaccines work and they are safe”
Never miss a chance!

- One study reported that the majority of mothers preferred receiving vaccine information before the initial immunization visit.

- In one study only 55% of practitioners routinely provide parents with the rationale for why vaccines are administered and their potential adverse effects.

- Let’s start the conversations early!
  - Prenatal visits
  - Newborn visit
  - Weight checks
A flu shot during pregnancy protects babies from flu up to 6 months later

Infants born to women who got the flu shot during pregnancy had:

70% lower risk of influenza

81% lower risk for influenza hospitalizations

Source: http://goo.gl/FXcD7j
Providing vaccine information is time consuming. One study found that 53% of physicians spend **10 to 19 minutes** discussing vaccines with concerned parents.

8% of physicians spend **20 minutes or more** with these parents.

80% of parents said in one survey that their decision to vaccinate was positively influenced by their primary care provider.

In one study early half of parents who were initially vaccine hesitant ultimately accepted vaccines after practitioners provided a rationale for vaccine administration—THAT’S GREAT!
DO YOU KNOW THE DIFFERENCE BETWEEN A MASTER AND A BEGINNER

THE MASTER HAS FAILED MORE TIMES THAN THE BEGINNER HAS EVEN TRIED.
When they just won’t budge

- Waivers: available on the AAP website
  - Should be used whenever there is a deviation from the recommended schedule
- Documentation
  - Document counseling and refusal in clinical note
  - Add to the problem list
- A note about coding
  - Z28.82 Immunization not carried out because of caregiver refusal
  - +/- Z71.89 Other specified counseling
  - 99401 Preventive medicine counseling, 15 mins
"The decision to dismiss a family who continues to refuse immunization is not one that should be made lightly, nor should it be made without considering and respecting the reasons for the parents' point of view."

"Nevertheless, the individual pediatrician may consider dismissal of families who refuse vaccination as an acceptable option. In all practice settings, consistency, transparency, and openness regarding the practice's policy on vaccines is important."
Some practices have chosen to dismiss these patients or to not accept new patients who will not vaccinate their children
- Lack of trust
- Obligation to treat
- Safety of other patients
- Severing of relationship

Outcomes in these practices has not yet been evaluated

Transparency and consistency is a must

There may be certain practices where this is not an ethical choice.
Highlights

- Start the conversation early
- Keep an open mind and meet the family where they are
- Counter inaccuracies and misinformation with facts and information
- Be prepared to discuss each concern and have an office plan for pain
- Offer resources and keep the conversation going
- Use motivational interviewing techniques and presumptive delivery
- Make it personal
- Consider your office policies and practices
Sources and Resources

- Countering Vaccine Hesitancy: Kathryn M. Edwards, Jesse M. Hackell, THE COMMITTEE ON INFECTIOUS DISEASES, THE COMMITTEE ON PRACTICE AND AMBULATORY MEDICINE Pediatrics Sep 2016, 138 (3) e20162146; DOI: 10.1542/peds.2016-2146


FOR PARENTS AND PROFESSIONALS:

- AAP Healthy Children: https://www.healthychildren.org/English/safetyprevention/immunizations
- CHOP: http://www.chop.edu/centers-programs/vaccine-education-center
- Immunization Action Coalition: www.immunize.org
- CDC: https://www.cdc.gov/vaccines/parents/index.html
- National Vaccine Information Center: http://www.nvic.org/
- Vaccines.gov: https://www.vaccines.gov/
- Everyone by 2: https://www.vaccinateyourfamily.org
- Paul Offit: http://paul-offit.com/resources/
- Voices For Vaccines: voicesforvaccines.org


Statement from the Catholic Medical Association: http://cogforlife.org/cmastatement.pdf

Link with official Vatican document: http://www.immunize.org/concerns/vaticandocument.htm

Accounts of vaccine preventable diseases: www.immunize.org/reports
Comments, Questions, Vents...

- Shhh....Don’t tell them I’m at the Great Wolf Lodge!