Techniques and Talking Points to Address Vaccine Hesitancy

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Worldwide prevent 2-3 million deaths every year.

In US prevent 42,000 deaths per birth cohort.
Objectives

- Discuss reasons for vaccine hesitancy.
- Answer the most common questions and concerns surrounding vaccines.
- Apply Motivational Interviewing (MI) strategies to address vaccine hesitancy.
Most Parents Vaccinate

Percent children age 24 months who received vaccinations, 2017

- 98.7% Vaccinated
- 1.3% Unvaccinated

Data source: Vaccination Coverage Among Children Aged 19–35 Months — United States, 2017. MMWR. v. 67, no. 40
≥ 1 MMR Vaccination Coverage Among Children 19-35 Months 2017

Content source: National Center for Immunization and Respiratory Diseases
https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/mmr/trend/index.html
Heat Map of Select County Non-Medical Exemption Rates, 2016-2017

https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002578
Parents Differ in Attitudes Towards Vaccination

Figure: Sanofi Pasteur 9/15 MKT30043
Common Questions From Vaccine Hesitant Families
(and their friends and neighbors and strangers at cocktail parties)

- Will too many vaccines overwhelm the immune system?
- Isn’t it better to space vaccines out?
- Does MMR vaccine cause autism?
- Are there harmful ingredients in vaccines?
- Isn’t it better to get the natural infection?

Source: Immunization Action Coalition. Quick Answers to Tough Questions. 2018. Item #58030
Children Receive More Vaccines Than in the Past, but Today They Contain Fewer Antigens

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<td><strong>Total</strong></td>
<td>3217</td>
<td>3041</td>
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<td>181</td>
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Sources: Gary Marshall. U of Louisville
Immunization Action Coalition. Quick Answers to Tough Questions. 2018. Item #58030
Alternative Schedules

- NY state children ≤ 9 months old followed alternative schedule: 25%
- Physicians reported parents requested spreading out vaccines: 93%
- Physicians sometimes/often/always agreed to spread out vaccines: 74%

Sources: Nadeau et al. J Pediatrics. 2015. v166
Kempe et al. Pediatrics 2015. v135.4
MMR Vaccine Does Not Cause Autism

• Many large, well-designed studies have found no link b/w MMR and autism.

• The 1998 study that started this concern was based on 12 children who were preselected.

• In 2010 *The Lancet* retracted the paper and the author Andrew Wakefield’s license to practice medicine in UK was revoked.
Mercury

The form of mercury found in thimerosal is ethylmercury (not methylmercury, which is the form that has been shown to damage the nervous system).

Although no evidence of harm has been proven, thimerosal was taken out of vaccines in the U.S. as a precaution.

Since 2001, with the exception of some influenza vaccines, thimerosal has not been used as a preservative in routinely recommended childhood vaccines in the U.S..

Source: Immunization Action Coalition. Quick Answers to Tough Questions. 2018. Item #58030
Aluminum

Aluminum is used in some vaccines as an adjuvant— an ingredient that improves the immune response.

Aluminum is the most common metal found in nature. It is in the air and in food and drink. Infants get more aluminum through breast milk or formula than vaccines.

Most of the aluminum in the body is quickly eliminated.

Source: Immunization Action Coalition. Quick Answers to Tough Questions. 2018. Item #58030
The Price Paid for Natural Disease

Measles Complications
- Hospitalization: 1 in 4
- Pneumonia: 1 in 20
- Encephalitis: 1 in 1,000
- Death: 1 to 2 in 1,000

Side Effects from MMR
- Fever: 5 to 15 in 100
- Rash: 5 in 100
- Arthralgia: 15 in 100 (adult women)
- Thrombocytopenia: 1 in 30,000 to 40,000

Sources: CDC “Complications of Measles”
CDC. Epidemiology and Prevention of Vaccine Preventable Diseases. 2017.
Vaccination Initiation Rates Depend on a High Quality Recommendation

If no recommendation or presented as optional: 20-30%

If low-quality recommendation: 50%

If high-quality recommendation (same way, same day): 70-90%

Optional: “Have you thought about what shots you’d like to get today?”

- May unintentionally imply shot is not important or few people do it
- 20-30% vaccination rate in studies of both childhood and adolescent vaccines

High quality: “We have some shots to do today”

- Implies shot is important and most people get it
- 70-90% vaccination rate in studies of both childhood and adolescent vaccines

Keep Entire Office Staff On Message

Photo Source: https://trending.com/images/2019-02-22/pediatric-office-staff-had-these-shirts-made-to-wear-at-work
What is Motivational Interviewing (MI)?

Patient-centered method for enhancing intrinsic motivation to change health behavior by exploring and resolving ambivalence.

Studies have illustrated the efficacy of MI as a promising strategy to encourage positive health behavior change around substance abuse, oral health and diet and exercise.

MI now being applied to help healthcare workers address parental vaccine hesitancy.

Motivational Interviewing Tools

- Asking open-ended questions
- Reflective listening
- Eliciting pros and cons of change
- Inquiring about the importance and confidence of making a change
- Summarizing the conversation
You are seeing an 15 month old who has not received the MMR vaccine or the 4\textsuperscript{th} DTaP dose. When you said, 

\textit{“Today we will have two vaccines for David—measles, mumps, rubella and the DTaP vaccine,”} 

the mother replied, 

\textit{“I don’t want the measles one.”} 

How should we handle this?
Motivational Interviewing: 4 Steps

Step 1: Ask the patient to share concern(s)

– “So you seem to have questions about the MMR vaccine. I want to make sure I answer all your questions, so let’s talk about it. Would you mind sharing what your particular concerns are?” (Note: non-threatening)

– Mom: “Well, I don’t think it’s safe. I heard that’s the one that causes autism.”
Step 2: Ask permission to share information

– The provider reflects back what the parent is saying to be sure he/she understands (empathy), summarizes, asks permission to share their own perspective.

– Example: “So I can hear that you’re concerned that the MMR vaccine can cause autism. I’ve also heard some stories about this vaccine and I follow vaccine safety closely. Is it okay if I go over what I know about this vaccine?”
Motivational Interviewing: 4 Steps

Step 3: Provide info to change a parent’s perspective

1) “Autism is a challenge for many families and people want answers— including me. But well conducted studies show that MMR vaccine is not a cause of autism.”

2) “But I have treated kids who got very sick from diseases we can prevent with vaccines. Tell me what you’ve heard about measles complications.”

Avoid arguing and focus on disease prevention.

Source: CDC. Preparing for questions parents may ask about vaccines Jan 2019.
Step 4: Make a personalized recommendation to vaccinate today

— Provider: “I strongly believe in this important vaccine, which is why I gave it to my daughters and I recommend it to all my patients. I think David should get it today. Having said that, this is a decision that only you can make. What do you think?”
Communication Tips

The provider should

✓ Ask
✓ Listen
✓ Use body language
✓ Check back
✓ Summarize
✓ Affirm the parent
Clinical Challenge: Part 2

You are seeing an 15 month old who has not received the MMR vaccine or the 4th DTaP dose. When you said, "Today we will have two vaccines for David—measles, mumps, rubella and the DTaP vaccine," the mother refused. She continued to refuse after you tried your motivational interviewing techniques.

How should we handle this?
Tips in case of declination or delay

- Let the patient know you will offer it again. Many parents who decline at first will vaccination later.
- Offer reading material
- Don’t over-remember this
- Relax. You’ve done your best for this patient.
Most parents vaccinate. They just have questions.

A strong vaccine recommendation works.

Try Motivational Interviewing techniques for more hesitant parents.
Resources

Immunization Action Coalition
http://www.immunize.org/

Vaccine Education Center-CHOP
https://www.chop.edu/centers-programs/vaccine-education-center