Vaccine-Preventable Disease: The Forgotten Story

Rachel M. Cunningham, MPH
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Objectives

• To appreciate recent statewide and nationwide trends regarding vaccines and outbreaks

• To describe how medical professionals are utilizing *Vaccine-Preventable Disease: The Forgotten Story* in conversations with parents

• To describe how sharing the book impacts parental immunization decisions
Benjamin Franklin stated...

“I lost one of my sons, a fine boy of four years old, by the smallpox...I long regretted bitterly and still regret, that I had not given it to him by inoculation; this I mention for the sake of parents who omit that operation, on the supposition that they should never forgive themselves if a child died under it; my example showing the regret may be the same either way, and that therefore the safer be chosen.”

Vaccines cause autism! Ban vaccines!

What were you doing?

Wow, I just got a splitting headache.

Listening to you, and drinking this bottle of water.

Water causes headaches! Ban water!
DEADLY CHOICES
HOW THE ANTI-VACCINE MOVEMENT THREATENS US ALL
PAUL A. OFFIT, M.D.
Where are we today?
Parental Delays and Refusals

The percentage of parents who refused or delayed vaccination doses increased from 22% to 39% between 2003 and 2008.

Most common reasons given for delaying or refusing:
- health of the child
- “too many, too soon”
- vaccines cause autism
- vaccines aren’t safe

Smith PJ. Presented at: 2010 Pediatric Academic Societies Annual Meeting; May 1-4, 2010; Vancouver, British Columbia.
California

In 2009-2010, 469 California schools had a vaccine exemption rate greater than 10 percent.

Of these, 178 schools had a vaccine exemption rate greater than 20 percent.

California Department of Public Health.  
http://www.cdph.ca.gov/programs/immunize/Documents/2009SchoolIZRateTable1.pdf
Also in California

In 2010, **9,273** cases of pertussis were reported in California. Rates were highest in infants <6 months (23.7 cases per 100,000).

**10** deaths were reported.

**9** of the reported deaths were in infants <2 months at time of disease onset and were not immunized.

**76%** of the hospitalized infants <6 months of age were Hispanic.

**9 of the 10** deaths were Hispanic infants.

*4/13/11 CDPH Pertussis Report*
Minnesota Hib Outbreak

![Bar chart showing Minnesota Hib outbreak cases from 2002 to 2008. The chart compares Minnesota cases (red bars) and national cases (blue bars). The number of cases decreases each year, with a significant drop in 2008.](chart_image.png)
Measles

- So far this year, 118 cases have been reported to the CDC.
- 6 of the 118 cases occurred in Texas.
- 47 resulted in hospitalization.
- 89% of the cases were unimmunized.
Role of the Health Care Provider (HCP)

• Most commonly trusted source for vaccine information
• 85% of pediatricians have encountered vaccine-delayers; 54% have encountered vaccine-refusers
• Decision to immunize directly related to level of trust in HCP
• Target education appropriately

Bottom Line: They either trust you or they don’t.

Framing the Message

“Anti-vaccine groups...have shared the heartbreak when they learned that their children were autistic and tied vaccines to it. People, logical or not, do not forget this kind of emotional prowess.”

“The power of anecdotal experiences or “sound bites” supplemented by visual imagery should not be underestimated.”

• 1st version published in March 2009

• Updated version published in October 2010

• Portrays 20 families affected by a vaccine-preventable disease
You’ve got it.
Now what to do with it...
Healthcare Providers and the Book

• Survey conducted among physicians (62%) and school nurses (29%)

• Other 9% - health professionals in a hospital, academic institution, non-profit, or public health

• Distributed in exam rooms (76%), schools (16%), conferences (4%), educational classes (3%), and “other” (26%)
Where is “other”?  

- Directly to parents  
  - Junior League  
  - Clinical faculty  
  - Prenatal consult  
  - PTA/PTO  

- Daycare  
  - Birthing class  
  - Health fairs  
  - Parenting class
How?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave in waiting/exam room</td>
<td>65</td>
</tr>
<tr>
<td>Use as a conversation tool</td>
<td>60</td>
</tr>
<tr>
<td>Give to parents</td>
<td>42</td>
</tr>
<tr>
<td>Educate medical professionals</td>
<td>11</td>
</tr>
<tr>
<td>Advocate for immunizations</td>
<td>7</td>
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</table>
76% of respondents reported using the book in direct conversation with parents about immunizations.

95% of respondents reported having a parent(s) change their mind about immunizations as a result of reading *Vaccine-Preventable Disease: The Forgotten Story*. 
**Parent Types**

*Advocate* : tells others about the importance of immunizations

*Accepter* : follows recommended schedule with few questions

*Ambivalent* : occasionally questions the importance of vaccines, asks limited questions, needs reassurance

*Delayr* : actively immunizes outside the AAP recommended immunization schedule but eventually is fully immunized

*Refuser* : actively refuses one or more immunizations at any time, never achieves complete immunization status
## Who and How Often?

<table>
<thead>
<tr>
<th>Parent Type</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Always</td>
</tr>
<tr>
<td>Advocate</td>
<td>8%</td>
</tr>
<tr>
<td>Accepter</td>
<td>2%</td>
</tr>
<tr>
<td>Ambivalent</td>
<td>8%</td>
</tr>
<tr>
<td>Delayer</td>
<td>22%</td>
</tr>
<tr>
<td>Refuser</td>
<td>37%</td>
</tr>
</tbody>
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Type of Immunization Information

- Other written: 20
- Verbal: 32
- Written and Verbal: 77
- Neither: 0
Type of Written Information

- Free handouts
- Purchased handouts
- No written information
- Web material
- Other vaccine book
Type of Verbal Information

- Professional experience
- Personal experience
- Describe written materials
- No verbal information
Recommendations for Future Use

• Great for refusers and delayers

• Effective at increasing perceived severity of and susceptibility to VPDs

• Most effective stories: flu, HPV, and pertussis

• Book is not a stand alone piece
“It allows parents to see themselves in possible scenarios that actually happened to real parents…”

“This book put real patients with the diseases in front of the parents.”

“It’s another voice speaking to them. It helps them to see what the consequences could be without vaccinating.”

“True stories about families of all backgrounds.”

“Helpful adjunct to provide to nursing employees to help them deal with parent refusals... parents will say "how do you know?" I may not personally know the heartache, but the individuals in the book do.”

“Compelling.”

“It tells it like it is.”

“Starts conversations and makes parents think.”

“It is an excellent tool to convey to parents the tragic effects of vaccine preventable illness on children and families as well as the success story of vaccination.”

“Personal stories have a far greater impact than statistics.”
Questions?

Rachel M. Cunningham
Texas Children’s Hospital
rmcunnin@texaschildrens.org
(832)-824-2010