Ethical Issues in Vaccine Hesitancy

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Background of Vaccine Hesitancy and Ethics

- 1776: Isolation, not inoculation, was the only authorized prevention
- ...until Washington's executive decision to inoculate the Continental Army
- 2015: Vaccination is Wisconsin State Law... except if you waive
- Wisconsin Law still allows vaccine waivers for "personal conviction, religious, or medical/health reasons"
- California's Example
  - SB 277 was signed into law and will take effect July 1, 2016
  - Eliminates personal belief exemption (and religious exemption)
  - Rhett Krawitt's Story (start @ 1:15)

Background of Vaccine Hesitancy

- American Academy of Pediatrics Reiterates Safety and Importance of Vaccines
  - 9/17/2015
  - by: Karen Remley, MD, MBA, MPH, FAAP, Executive Director, American Academy of Pediatrics
  - "The American Academy of Pediatrics would like to correct false statements made during the Republican presidential debate last night regarding vaccines. Claims that vaccines are linked to autism, or are unsafe when administered according to the recommended schedule, have been disprove by a robust body of medical literature. It is dangerous to public health to suggest otherwise.
  - "There is no 'alternative' immunization schedule. Delaying vaccines only leaves a child at risk of disease for a longer period of time; it does not make vaccinating safer.
  - "Vaccines work, plain and simple. Vaccines are one of the safest, most effective and most important medical innovations of our time. Pediatricians partner with parents to provide what is best for their child, and what is best is for children to be fully vaccinated."

Vaccinations – The Public Health Perspective

Themes

1. Positive benefit:risk ratio
   - High risk to pediatric population
   - Low risk associated with vaccines
2. Herd immunity
   - What is the significance?
3. Real World Evidence
Positive Benefit: Risk Ratio

- Vaccine preventable diseases are still a threat
  - Can strike at any time – still circulating globally
  - Can be highly contagious
  - Can range from mild to severe, even fatal
- Vaccines are safe
  - Components have changed
  - Far more scrutiny on manufacturing processes
  - Surveillance methodology has improved

Herd Immunity

Enough of the population is vaccinated or immune to protect the rest of the population

<table>
<thead>
<tr>
<th>Measles</th>
<th>Mumps</th>
<th>Rubella</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>Avg.</td>
<td>Ranges</td>
</tr>
<tr>
<td>100%</td>
<td>0.2%</td>
<td>0.1 - 1.0%</td>
</tr>
<tr>
<td>90%</td>
<td>0.6%</td>
<td>0.3 - 1.3%</td>
</tr>
<tr>
<td>50%</td>
<td>1.1%</td>
<td>0.5 - 3.0%</td>
</tr>
<tr>
<td>10%</td>
<td>5.0%</td>
<td>2.0 - 8.0%</td>
</tr>
</tbody>
</table>

Measles Outbreaks 2014-2015

- Disneyland, Dec 2014
  - 111 cases
  - 86% unvaccinated or unknown status
  - Most of the unvaccinated were intentionally so
  - Foreign import of diseases can rapidly spread
- Cook County, Jan 2015
  - 15 cases
  - 13 in one daycare center
  - 11 cases under 1 year of age
  - Those who can’t be vaccinated rely on herd immunity

The Ethics of Vaccinations

- **What is the ethical conflict?**
  - Parental Choice versus Public Health
    - (Autonomy versus Common Good?)
    - OR
  - Mistrust of Medicine versus Child Health
  - (Threat of Paternalism versus Best Interest)

The Ethics of Vaccinations

**Autonomy** *(autónóm os)*
- self-governing
- does not apply to children

...so what does decision making on behalf of children look like?

The Ethics of Vaccinations

- Substituted Judgment cannot generally be employed
- **Best Interest** is the appropriate standard of decision making for children
  - “what a reasonable person might choose in the same context and is based on what is ultimately best for this particular patient in these particular circumstances”
- Role of the Physician
  - Child Advocate and Parental Advisor
  - in the context of shared decision making
Compelling Argument

Seeking the Common Good

- Risks of vaccines mitigated by the overwhelming benefit of an immune and healthy society
- Widened scope of common good
- Special concern for vulnerable populations, i.e. those with serious illnesses (like Rhett), neonates, immigrants, elderly
- Public Health mindset: what makes one person healthier makes us all healthier
- Common ground for shared decision making between physician and parents: concern for child’s health within the greater community

Compelling Argument

Child Health and Avoidance of Harm

- Focus on the direct effects to the child
- Risks of vaccines in the practical circumstance of this child balanced by the potential for harm, illness, pain, suffering
- Limited scope of common good
- Analogies to other child safety movements: bike helmets, car seats, etc.
- Common ground for shared decision making between physician and parents: concern for child’s health

A Not-So Futuristic Case Study

Gia is a 13 y/o patient at the clinic to see Dr. K for a physical before the beginning of the school year. Per her parents’ request, Gia did not receive the MMR vaccination as a child. When Gia’s brother was born, and MMR was refused on his behalf as well, their then-pediatrician’s office sent a letter stating they would no longer be able to provide care for their family since they did not follow professional medical advice. Dr. K took over seeing Gia and her brother at this point. While Dr. K has brought up vaccinations in the past, the parents were steadfast in their decisions, and she stopped, feeling that it is a tired conversation.

At this visit, Gia tells Dr. K that she is looking forward to qualifying for the spring band trip that tours Germany, Poland, and Lithuania. She also says she is interested in a service trip to Mexico next summer before college, but heard from the trip leader that she will need her vaccinations before then. Her mother quickly says, “No Gia, you don’t have to, we can just sign a waiver.” Gia looks to Dr. K and asks, “but will I be safe to travel?”

Determinants of Vaccine Hesitancy

1. Confidence – trust of clinician, industry, government
2. Complacency – perception or value of need
3. Convenience – access to vaccination
4. Varying degrees of indecision
   - Accept, but concerned about, all vaccines
   - Refuse or delay some vaccines, but accept others
   - Refuse all vaccines

Vaccine Confidence

- Public concerns about vaccines
  - Not just safety, but also ...
  - Policies, recommendations, costs, research
- Vaccine acceptance is complex
  - Not just scientific or economic evidence
  - Also psychological, sociocultural, political reasons

Vaccine Complacency

- Risks of perceived as low
  - Severity of vaccine-preventable diseases
  - Ease of transmission of VPDs
- Under-appreciation of effectiveness & safety
  - VPDs rare & mild ➔ Vaccination considered unnecessary
Vaccine Convenience

- Perceived quality of service
- Time & place of vaccinations
- Vaccination processes not considered
  - Appealing
  - Affordable
  - Convenient
  - Comfortable

Fence sitters

<table>
<thead>
<tr>
<th>Vaccinators</th>
<th>Non-Vaccinators</th>
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<tbody>
<tr>
<td>Acceptors</td>
<td>Accept vaccine</td>
</tr>
<tr>
<td></td>
<td>but have</td>
</tr>
<tr>
<td></td>
<td>significant</td>
</tr>
<tr>
<td></td>
<td>concerns</td>
</tr>
<tr>
<td>Late</td>
<td>Delay vaccination</td>
</tr>
<tr>
<td>Vaccinators</td>
<td>or choose only some vaccines</td>
</tr>
<tr>
<td>Rejecters</td>
<td>Completely reject vaccination</td>
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Communication Principles

- Make simple, clear, consistent recommendations.
  - “These are the vaccines your child needs today.”
- Only if objections, then stop & listen to concerns.
  - Express surprise that refusal is not the social norm.
- Assume parent has child’s welfare as the goal.
- Positive messages: Vaccine safety & efficacy
- Build trust - multiple visits
  - Motivational interviewing
- Don’t dismiss patients, have parents sign forms:
  - www2.aap.org/immunization/pediatricians/pdf/refusaltovaccinate.pdf

Strength of Recommendation

The strength of a clinician’s recommendation is the factor most strongly associated with the patient choosing to be vaccinated.

Discussion & Questions

Thank you!

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