The Anti-Vaccine Movement

Common Themes in History and Present Day
Variola

- Emerged 10,000 BC.
- 400,000 Europeans/year died in late 18th century
- 20-60% mortality (80% in children)
  - HRE Joseph I-1711
  - King Luis of Spain-1724
  - Czar Peter II-1730
  - Queen Ulrika of Sweden-1741
  - King Louis XV of France-1774
- 300-500 million deaths in 20th century
- 1967-15 million contracted disease; 2 million deaths
- Eradicated 1979
Variolation

- China: Dried smallpox scabs blown into nose resulted in mild disease and conferring immunity
- Practice spread to Africa, India, Ottoman Empire
- 1721: Smallpox material inserted under skin of several prisoners and orphans in England

Lady Mary Wortley Montagu

- 1706: Onesimus described inoculation to Mather

Cotton Mather

- 4/22/1721: HMS Seahorse to Boston resulting in epidemic
Variolation to Vaccination

- 1796 - Inoculated the 8 yr old son of his gardener with material from cowpox blisters on a milkmaid’s hand
  - Subsequently injected boy with variolous material and remained well
  - Repeated on 23 additional subjects successfully
  - Published pamphlet in 1798
- Awarded £10,000 and then £20,000 by British Parliament to fund further investigation
- Subjected to attack and ridicule by members of medical establishment and religious leaders
Early Vaccination Satire
Early Vaccination Law

- Vaccination Act of 1840 outlawed variolation as comparatively unsafe to vaccination and allowed vaccination to be done at public expense.
- Vaccination Act of 1853 required vaccination for all infants and included fines and imprisonment as penalties.
- Vaccination Act of 1867 extended requirement to age 14 and mandated cumulative penalties for non-compliance.
Birth of Anti-vaccine Movement

A poster advertising a demonstration in Andover Town Hall in support of a Mrs Blanchard on her release from imprisonment for refusing to allow her children to be vaccinated.
British Anti-Vaccine Leagues

• 1830- Born in Manchester, England

• Influenced by pacifism, temperance and utopian movements

• 1850’s- Journeyed to America - Underground Railroad

• 1860’s- Returned to England- founded or contributed to causes supporting the Blind, RSPCA, prevention of child cruelty

• 1869- Committed to Anti-Vaccine Movement

• 1880- Formed London Society for the Abolition of Compulsory Vaccination
Leicester Demonstration
March of 1885
Anti-Vaccine Movement Comes to US

- 1902- Smallpox outbreak
- 1905- Jacobson v. Massachusetts
- 1908- Anti-Vaccination League of America
- 1922- Zucht v. King

Henning Jacobson
Anti-Vaccine Movement Comes to US

John Pitcairn

- Founder of Pittsburgh Plate Glass Company (PPG Industries)
- 1908 - Sponsored National Anti-Vaccination Conference
- First President of Anti-Vaccination League of America
- 1910 - “The Fallacy of Vaccination”
- 1911 - Appointed to Pennsylvania State Vaccination Commission
<table>
<thead>
<tr>
<th>Common Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health versus Autonomy</td>
</tr>
<tr>
<td>Scientific versus Natural</td>
</tr>
<tr>
<td>Medical Leaders</td>
</tr>
<tr>
<td>Political Leaders</td>
</tr>
<tr>
<td>Popular Figures</td>
</tr>
</tbody>
</table>
Prime Differences

Diffusion of Information

Mobility

Evidence
What Do You Do?

Doctor, what is your opinion?

- Popular figures have opinions
- Politicians have opinions
- Good physicians have science and evidence