The Anti-Vaccine Movement: Lessons from the Past

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The Birth of Fear

The pertussis vaccine, 1982
DPT: Vaccine Roulette

- Anti-vaccine movement in America born on April 15, 1982.
- Lea Thompson and “DPT: Vaccine Roulette.”
- Showed series of children with permanent brain damage following DTP vaccine.

The pertussis vaccine

- Barbara Loe Fisher, Kathi Williams, and Jeff Schwartz form Dissatisfied Parents Together, later the NVIC.
- Within one month, Paula Hawkins holds a congressional hearing to discuss vaccine safety.

The pertussis vaccine

- Media coverage claiming that the whole-cell pertussis vaccine caused brain damage.
- Flood of lawsuits successfully claiming that pertussis vaccine caused SIDS, Reye’s Syndrome, coma, mental retardation, epilepsy, and transverse myelitis.
### Pertussis science matures, but too late

- Epidemiological studies during next 10 years showed no increased risk for epilepsy, retardation following pertussis vaccine.

### Impact of lawsuits

- Price of DTP vaccine rose from $0.19 in 1980 to $12.00 in 1986.
- Number of OPV vaccine makers declined from 3 to 1, of measles vaccine from 6 to 1, and of pertussis vaccine from 8 to 1. Birth of NCVIA and the VICP.

### NVIC

- Continues to weigh in on vaccine safety.
- Notion that vaccines have merely replaced infectious diseases with chronic diseases.
- NVIC is media savvy, politically connected, and lawyer-backed.
<table>
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<th>Introduction of new vaccines</th>
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<td>HBV (newborns):</td>
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Acting on Fear: Vaccine Exemptions

Do United States citizens have a constitutional right to exempt themselves from vaccines?

United States Supreme Court

- Jacobson v. Massachusetts (1905)
  - Outbreak of smallpox in Boston
  - Cambridge Board of Health requires smallpox vaccine or $5.00 fine
  - Henning Jacobson refused both
Justice John Marshall Harlan

United States Supreme Court

“The liberty secured by the Constitution of the United States...does not import an absolute right...to be wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good...Society based on the rule that each one is a law unto himself would soon be confronted with anarchy and disorder.”

United States Supreme Court

Prince v. Massachusetts (1944)
- Jehovah’s Witness claims right to have young children distribute pamphlets.
- Judge ruled against Prince, claiming religious freedom did not trump child labor laws.
Prince v. Massachusetts (1944)

“A parent cannot claim freedom from compulsory vaccination for the child any more than for himself on religious grounds. The right to practice religion freely does not include the liberty to expose the community to infectious disease. Parents may be free to become martyrs themselves; but it does not follow they are free...to make martyrs of their children.”

Although no constitutional right to refuse vaccines, states may allow exemptions

Religious Exemptions: State Courts
- Wright v. DeWitt High School, 1965
- McCartney v. Austin, 1968
- Avard v. Manchester Board of School Committee, et al., 1974
- Brown v. Stone, 1979
- Davis v. Maryland, 1982
New York State Assembly, June 20th, 1966

- New York State considered a bill requiring polio vaccine for school entry.
- Passed by a vote of 150-2.
- Two dissenting votes because the bill excluded parents whose religion forbade vaccination. Direct result of lobbying efforts by one religious group.

Which religion prohibits vaccines?

- Old testament: 1400-400 B.C.
- New testament: 117-138 A.D.
- Qur’an: 610-632 A.D.
- Smallpox vaccine: 1796 A.D.
Mary Baker Eddy (1821-1910)

Christian Science
- Born in 1875 with Baker’s publication, *Science and Health*.
- Believed that illness was a spiritual, not a physical disorder. Diseases should be treated with prayer, not medicines or surgeries.
- “We have smallpox because others have it. But mortal mind, not matter contains and carries the infection.”

Christian Science in 1875
- Before establishment of the germ theory (Koch’s postulates in 1890).
- Before visualization of viruses by electron microscopy (1930s).
- Before anti-serum therapy (1894), insulin (1921), or antibiotics (1935).
Christian Science in 1966

- Diptheria vaccine (1920s), tetanus vaccine (1940s), pertussis vaccine (1940s), polio vaccine (1955), and measles vaccine (1963).
- Polio vaccine had dramatically reduced the incidence of polio in the United States.

Joseph Margiotta (R), Nassau County

- “Suppose an exempted child was a polio carrier.”
- Tribute to the wide berth given religion in the United States that we were willing to allow children to suffer polio because of a belief system grounded in faith healing.
The Daycroft School, Greenwich, CT

**Daycroft School, 1972**
- Outbreak of polio that paralyzed 11 children in a school of 128.
- At the time of the outbreak, there hadn’t been a single case of polio in CT for more than three years.
- Polio didn’t spread to the surrounding community.

**Response to Daycroft outbreak: NEJM**

“I am deeply bothered that disease-prevention measures of documented benefit can be withheld by their parents in the name of religious freedoms, jeopardizing the health... of the community as well. The courts of this land have long since set precedent in the protection of children from the irresponsible acts of their parents.”
Maier v. Besser, 1972
- William Maier took advantage of the New York State decision, successfully claiming his First Amendment rights. Can’t discriminate against me because I’m not a Christian Scientist.
- 48 states now have religious exemptions to vaccination

Sheer v. Northport Union School, 1987
- Lewis Levy argued: “To us, religion is not a temple; religion is not something outside of ourselves.”
- Judge agreed: Vaccine exemptions granted “if beliefs were held with the strength of religious convictions” even if parents weren’t members of a religious group. 21 states now have philosophical exemptions.

Consequences of Fear
## Current outbreaks

- Pertussis, Delaware 2006
- Measles epidemic, 2008
- Hib deaths, 2009

## The Voice of Society

- Hospitals mandating influenza vaccine.
- Doctors choosing not to see unvaccinated patients in their practice
- Parents concerned about sending children to day-care centers, classrooms (Tatel, Yarkin, Flint)