Vaccines, Global Health and Ethics

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Goal of Vaccination Programs:

- Maximize benefits in preventing morbidity and mortality in all populations (equity)
- Minimize exposure to severe vaccine-related adverse events and infringement on decision-making prerogatives of individuals
Vaccines: the ethical issues
What are the risk benefit questions?

- Acceptability of vaccine associated risk is less than what would be tolerated for treatment
- Many vaccine-preventable diseases not remembered by citizens or health care workers
- Inaccurate perception of relative risks and benefits of vaccines
- Tolerance of vaccine related risks for children even more limited
- Individual refusal compromises herd immunity
- Which VPD to target and the ethics of trials, especially in vulnerable populations
Recent debates: H1N1 Pandemic influenza

• Time required to produce initial doses was 6 months – too long
• Improved production increases equitable global access but global sharing of viruses was not happening
• Equitable access to vaccine did not occur
  – WHO procured limited vaccine supplies for developing countries
  – 2009/2010 pandemic some countries destroyed vaccine whilst developing countries had limited access
• With limited supplies prioritisation is required
Eradication campaigns

Eradication has been goal of public health since earliest days of vaccination. Since smallpox, possibility of polio, measles, malaria.

The polio eradication debate:
Within reach but is eradication the correct goal?
OR
Maintain the current level of control and redirect eradication efforts to other pressing global health needs
Vaccine safety and risk controversies

Critics usually but not always from developed nations, allege that various vaccines and the overall vaccination series is associated with risks.

Anti-Compulsory Vaccination League -1878

THE NATIONAL ANTI-COMPULSORY-VACCINATION REPORTER.

"Only by the most resolute resistance will legislators be brought to realize what frightful injustice and inhumanity they have suffered themselves to be betrayed by a domineering Trades' Union, which, although it lives upon the diseases of mankind, has yet, with comical simplicity, been constituted guardian of the public health; 'the goat,' to use a German proverb, 'being thus appointed head gardener.'"—Count Zedwitz.

Vol. III., No. 4.] JANUARY 1, 1879. [Published Monthly.

The Exceeding Wickedness of the Compulsory Vaccination Law, and of other Medical Legislation connected with it. Experience, for contagion to spread there must be communication between persons either by exhalations from the body or by actual contact. Five or six feet would be the utmost limit of distance over which contagion would spread. He knew of no case in which a doctor had conveyed contagion from a
So what do we need to do?

• Scientists (and the Media!) must not treat fear and reservation as ignorance and then try to destroy them with a blunt "rational" instrument.

Mission: No forced Vaccination. Not in America
Vaccine Zombie Song (2010)
In Philippines, fears that tetanus vaccines cause sterilization lead to a 45% drop in coverage between 1994 and 1995.

In 1998 France suspends Hepatitis B vaccination in schools exacerbating public concerns -- low levels of hepatitis B vaccination persist today.

Ukraine panic about MR vaccine safety: 2008 campaign targeting 7.5 million reaches only 116,000.

In India 2010, HPV vaccine Phase 4 study stopped because of allegations of unethical trial, and community interpretation of serious adverse events.

Modified from Heidi Larson, LSHTM, 2011.
Vaccines in humanitarian emergencies

Equity?
Choices?
Informed consent?
Building Confidence?

CIA's 'fake vaccine drive' to get Bin Laden family DNA

The CIA ran a fake vaccine programme in the Pakistani town of Abbottabad to try to get a DNA sample from the family of Osama Bin Laden, media reports say.

The Guardian newspaper says CIA agents recruited a Pakistani doctor there to organise the vaccination drive. The paper says he has since been arrested.

Bin Laden was top of the US 'most wanted' list

CIA 'set up fake vaccination programme to capture Osama bin Laden's DNA'

The CIA set up a fake vaccination programme in Pakistan as it tried to confirm where Osama bin Laden was hiding, it has been claimed.

CIA vaccine program used in bin Laden hunt in Pakistan sparks criticism
Thank you

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