

HPV vaccination coverage drop: are there common denominators?

Alex Vorsters & Pierre Van Damme

HPV prevention and control board

Centre for the Evaluation of Vaccination

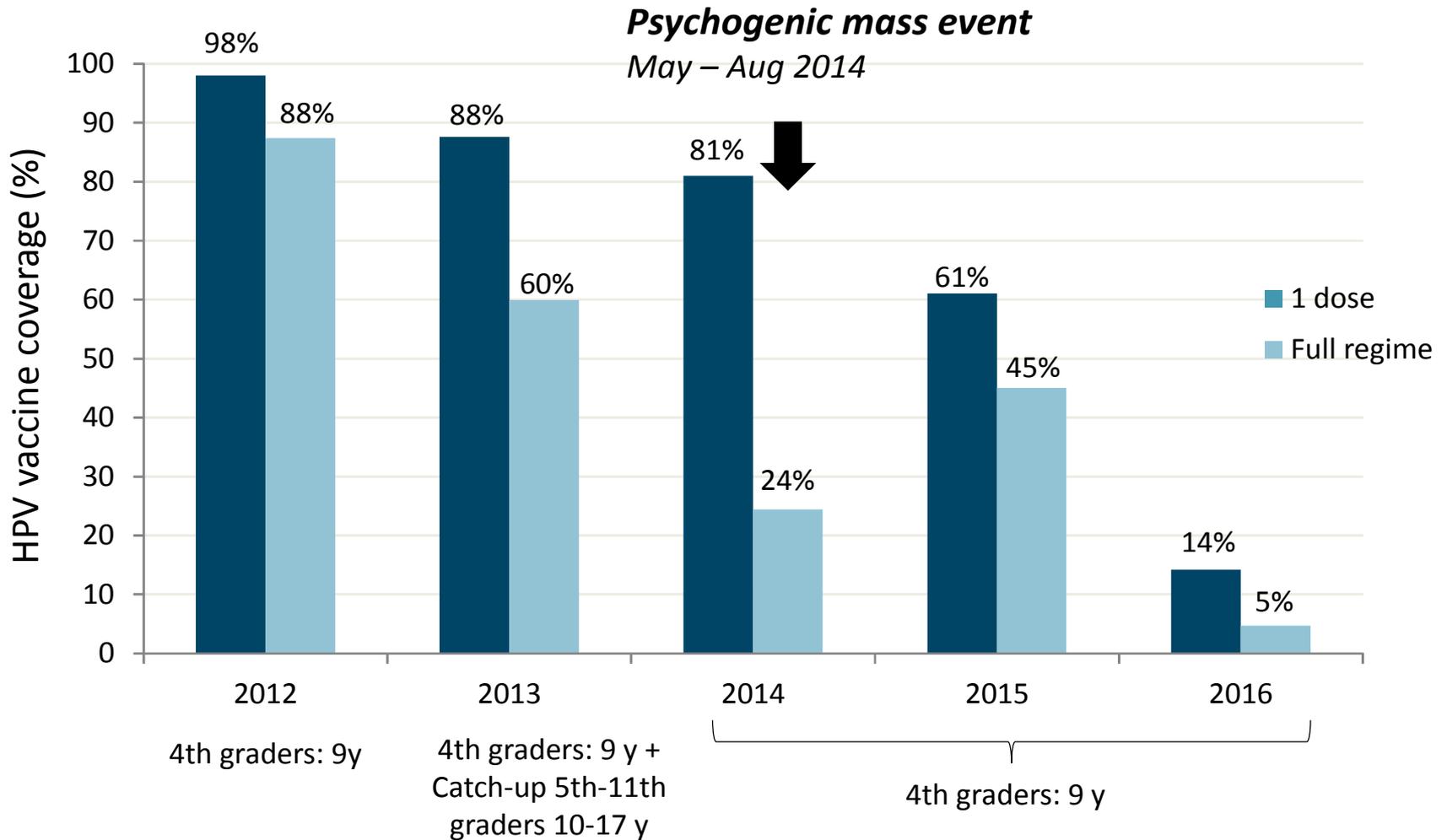
Vaccine and Infectious Disease Institute

University of Antwerp

Introduction

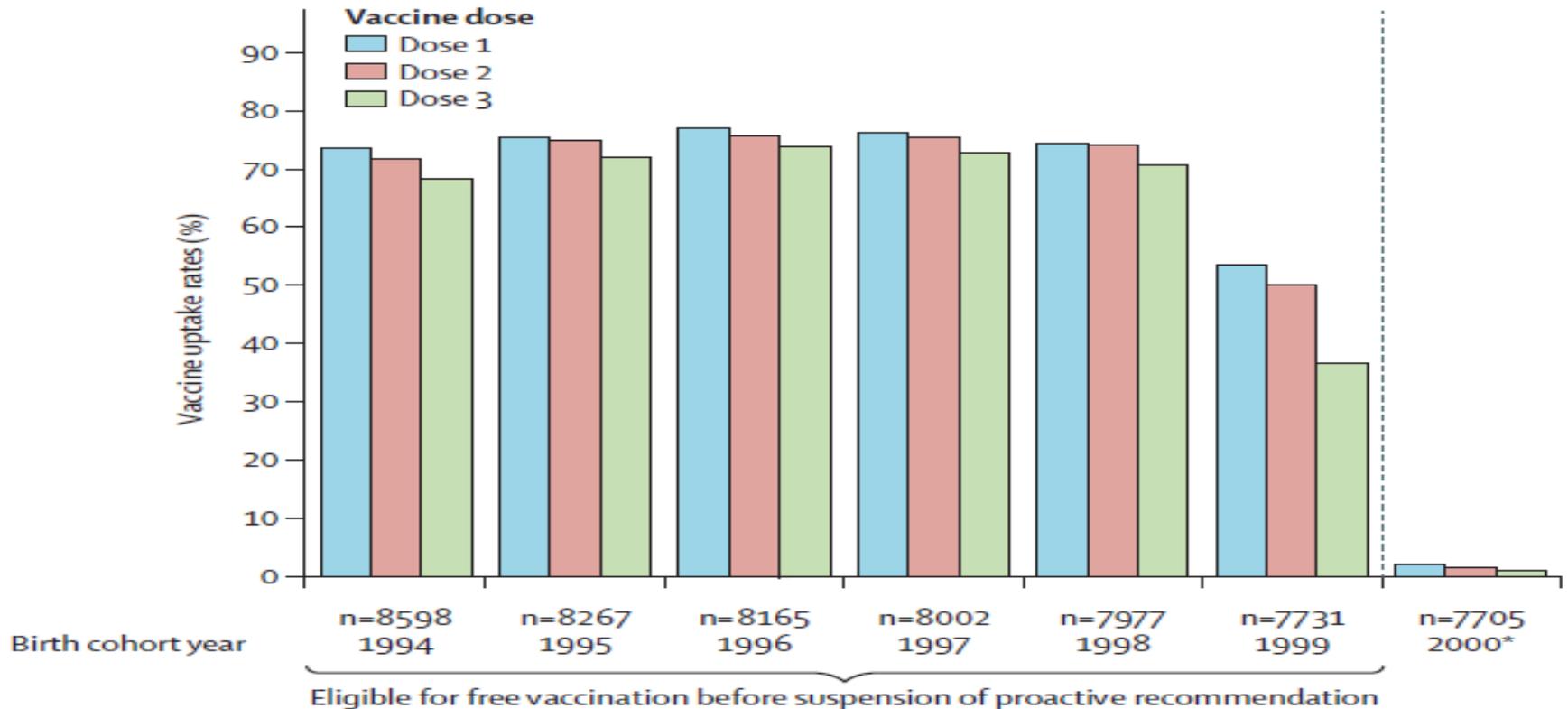
- A number of countries faced steep or substantial drop in HPV vaccine coverage.
 - E.g. Japan, Colombia, and Denmark
- Previous meetings:
 - Barriers in HPV vaccination & cervical screening programmes', 27-28 June 2016, Antwerp, Belgium
 - Prevention and control of HPV and HPV- related cancers in Denmark: lessons learned and the way forward', 17-18 November 2016, Copenhagen, Denmark
 - Posters presented at the Symposium: "Building Trust, Managing Risk: Vaccine Confidence and Human Papillomavirus Vaccination, 7-8 June 2017, London, UK
 - Japan, Colombia and Denmark

Coverage rate HPV vaccination in Colombia



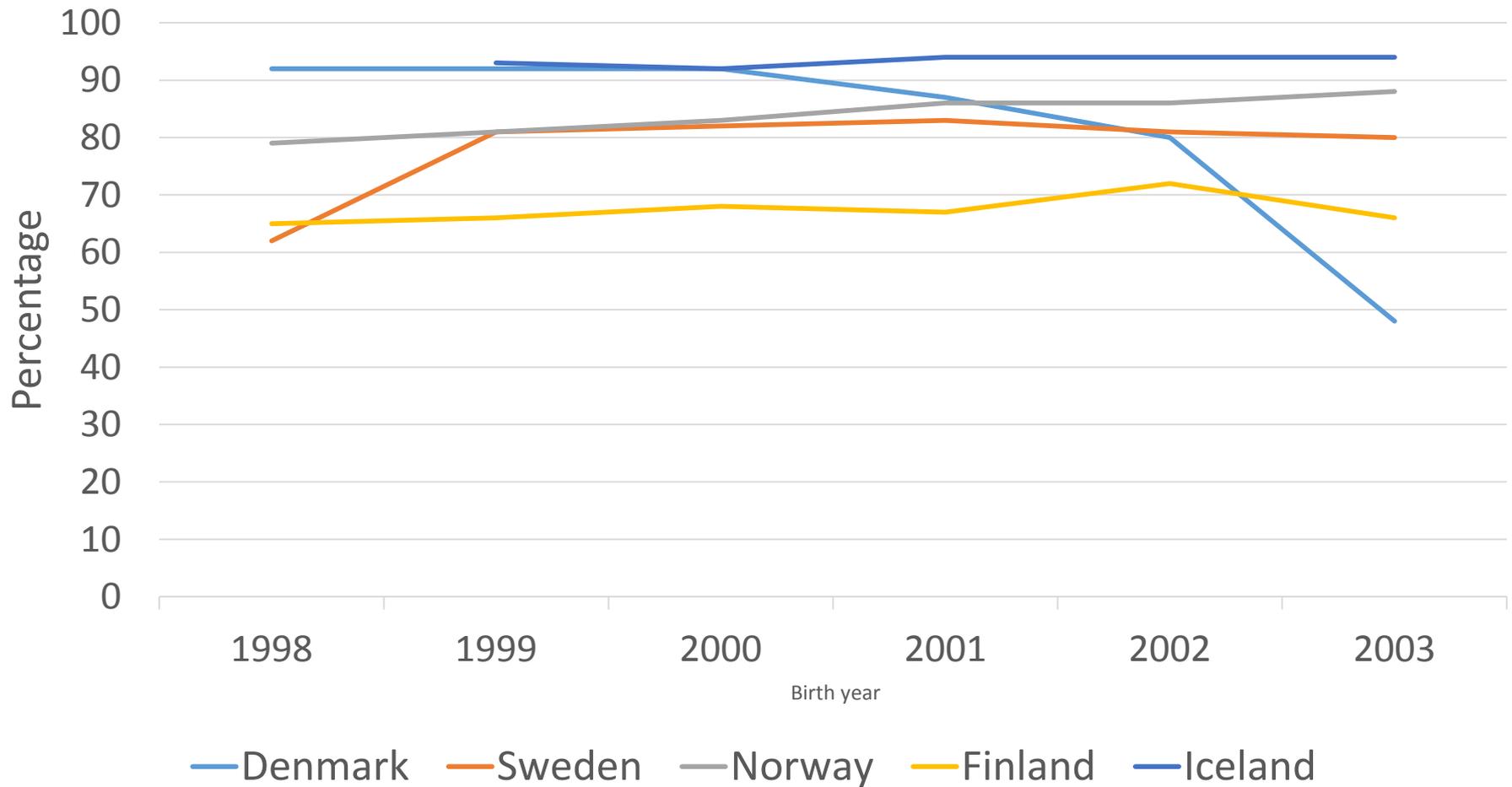
Personal communication from the ICO HPV Information Centre. Data from Colombia Ministry of Health and Social Protection

Uptake rates HPV vaccine in Sapporo, Japan, as of March, 2014



The first birth cohort who were eligible for free vaccination after suspension of proactive recommendation.

Coverage rate HPV vaccination / birth cohort I in different Nordic Countries



Courtesy of Palle Valentiner-Brandt

Evolution of Immunization Program and Prominence of Vaccine Safety

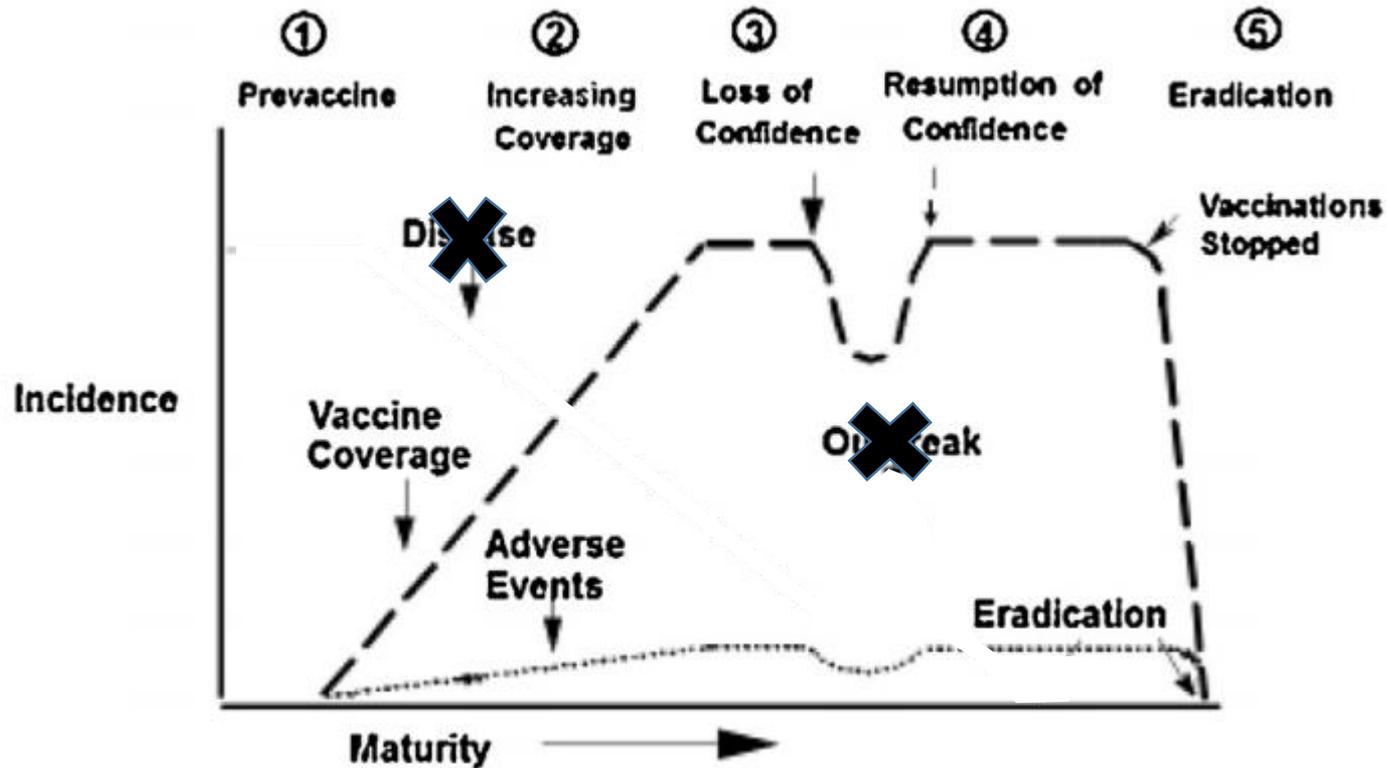


Fig. 1. Potential stages in the evolution of immunization program, showing the dynamics of the interaction between vaccine coverage, disease incidence and vaccine adverse events, as the program matures from pre-vaccine to disease eradication

Mapping of stakeholders/factors potentially having impact on HPV vaccination coverage in the different countries

Events being associated with vaccination

- observed in vaccinated girls
- having a long and severe impact on coverage

Organized “anti-vaccine” activities/groups

- getting lot of attention and seem to have large impact on social medial.
- referring to limited number of “bad science” articles

Public confidence Adolescents/Parents

- in general very positive towards importance, safety and effectiveness of vaccines. Very good coverage of other vaccines (JP,DK, CO)
- follow recommendation of vaccinators (JP, DK)

Vaccine providers/ HCW

- most important information / recommendation source for parents/girls
- appropriate training (especially GPs and other HCW outside a school based vaccination system) is challenging
- should very well understand difference between association time and causality

Media and social media

- Events are covered extensively; not always taking into account scientific arguments

Government Ministry of Health NITAG

- response is slow, absence of crisis plan or strategy
- stops recommending vaccination (JP); starts sponsored investigation (DK)

Academic researchers

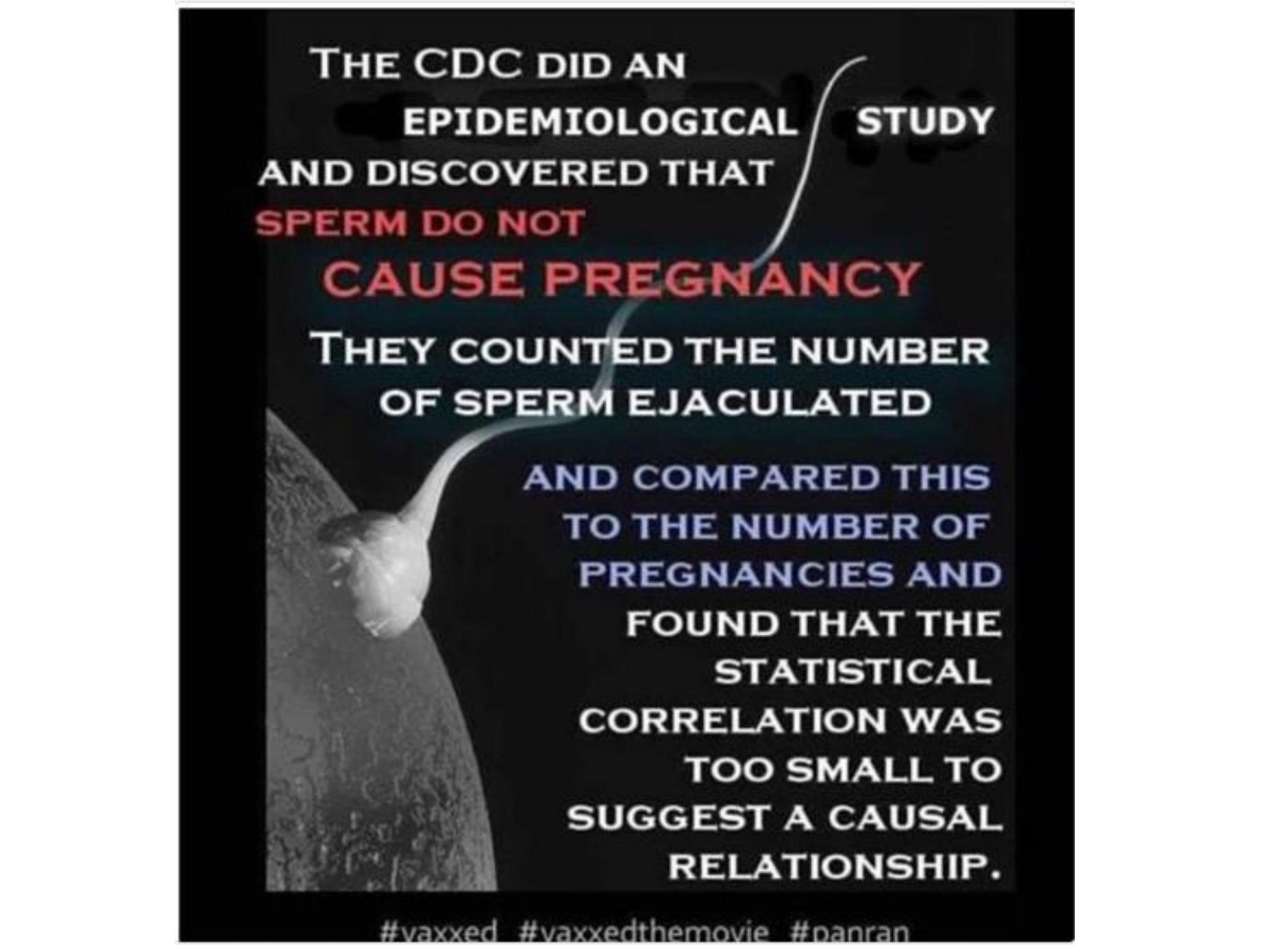
- those that defend vaccination are blamed to be biased by Industry
- some generate ‘bad science’ attempting to demonstrate causality between vaccines and AE.

Industry/Vaccine manufacturers

- have data, expertise and early alert systems
- often negatively perceived
- reports from assertive marketing reinforcing negative perception.

Vaccine injury reimbursements /court cases

- supported/stimulated by ‘anti-vaccine’ groups, specialized lawyers
- opinions from experts called in by parents/lawyers are not necessarily supported by the scientific community.
- reimbursement does confirm a direct causal link



THE CDC DID AN
EPIDEMIOLOGICAL STUDY
AND DISCOVERED THAT
SPERM DO NOT
CAUSE PREGNANCY

THEY COUNTED THE NUMBER
OF SPERM EJACULATED

AND COMPARED THIS
TO THE NUMBER OF
PREGNANCIES AND
FOUND THAT THE
STATISTICAL
CORRELATION WAS
TOO SMALL TO
SUGGEST A CAUSAL
RELATIONSHIP.

Safety of vaccines: interpretation = difficult

- What we 'see' determines our perception

	Disease
	Yes
Vaccinated	16
Not vaccinated	

Safety of vaccines: interpretation = difficult

- What we 'see' determines our perception
 - **but we need the total picture:**

	Disease	Total
	Yes	
Vaccinated	16	
<hr/>		
Not vaccinated	4	

Safety of vaccines: interpretation = difficult

- What we 'see' determines our perception
 - **but we need the total picture:**
 - population 200,000
 - Risk of a disease (e.g. MS): 1/10,000
 - Immunization rate: 80%

	Disease		Total
	Yes	No	
Vaccinated	16	159,984	160,000
Not vaccinated	4	39,996	40,000

Lessons learnt at our Denmark meeting

- Include a **communication budget** at the start of (national) vaccination programs;
- Consider the **use of social media** as part of the communication strategy;
- Provide **training to HCP** on how to discuss the vaccine with vaccinees and their parents;
- Develop a **crisis action plan before the introduction** of vaccination, as there will be no time once a crisis occurs;
- Define the right **age for vaccination**, as this may diminish some challenges;
- Communicate about the vaccine as **one voice among experts**;
- Take potential side effects seriously, but without focusing on the alleged link, keeping the **focus on the positive benefit risk balance** of the vaccine.
- Reach out to silent supporters of the vaccine

Conclusions of barriers meeting in Antwerp

- good preparation, well in advance of the start of the program
- good communication, with all parties involved, with material that is suitable for each target group, and extra attention for hard-to-reach populations, as they may be at higher risk
- a school-based system
- an action plan to quickly and effectively handle anti-vaccine media exposure
- appropriate data management and linkage to facilitate early detection of signals, but also show impact of vaccination

Thank you for your attention



www.hpvboard.org

