

Vaxxed: From Cover Up to Catastrophe (2016)

A 90 minute film that claims the MMR vaccine is responsible for an exponential rise in children being diagnosed with Autism Spectrum Disorder (ASD).

There is no scientific basis for the claims outline in the film and MMR vaccine continues to demonstrate an excellent safety profile

The claim is based on two major narratives:

1. Phone calls between a researcher at the CDC (William Thompson) and Brian Hooker.
 - Sections of the phone calls are played as evidence that in one study the CDC hid/destroyed data that demonstrated a link between the MMR vaccine administration and onset of ASD.
 - Hooker gets a copy of the original data and reanalyses it, showing what he claims is a strong link between the age MMR is given and onset of ASD.
2. Interviews with parents about their children with ASD.
 - Parents firmly believe that the MMR vaccine was responsible, as they considered that their children experienced dramatic changes in behaviour immediately after the vaccinations and then the children went on to be diagnosed with ASD.

Other complementary content-

3. Data on the rise in ASD rates in the United States with a claim that 80% of all boys will be diagnosed ASD by the mid 2030s (based on current rate growth). – This omits the fact that diagnostic criteria have changed and more children are being diagnosed as ASD; the emerging role of genetics; the high risk in aging parents; and environmental exposures.
4. Interviews with medical professionals that are swayed by Brian Hooker's reanalysis of the CDC data. – This omits any review by epidemiologists or other appropriate experts
5. Andrew Wakefield (the Director and writer of the film as well) interviewed regarding his early research demonstrating a possible link between MMR and various medical issues. – Omitting the fact that the research was found to be fraudulent

Key points

- 'Vaxxed' is written and directed by Andrew Wakefield. It appears to be an attempt to stir up more fear and unrest against the MMR vaccine, and bolster his own business and reputation. He has a patent for a single valent measles vaccine.
- The original publication in 1998, a small observational study by Andrew Wakefield and colleagues was withdrawn by the journal and has been widely discredited since based on falsification of data and gross breaches of ethics. Furthermore, Wakefield was found to have worked for attorneys who were suing MMR manufacturers, and trying to patent his own version of measles vaccine which he did not disclose. He has been struck off the UK Medical register for his fraudulent behaviour.

- There is extensive peer reviewed published scientific studies that have clearly shown no link between MMR and autism. The studies include very large numbers and a range of methodologies and they all compare vaccinated with unvaccinated.
- This movie is focussed on one retracted study by a single author and does not make any comments about the large body of scientific material in all the other studies.
- The phone call excerpts from William Thompson are manipulated and edited to tell the story Wakefield wishes to tell.
- The re-analysis of the CDC data by Hooker was a mess. He used incorrect analytical methods for the type of data. The paper he wrote based on the reanalysis was withdrawn by the journal that published it because of these errors and his failure to disclose conflicts of interest.
- Estimates from the Global Burden of Disease Study indicate that globally 62.2 million people are currently on the autism spectrum and are affected by autism spectrum disorder. Such numbers have not changed significantly over the last decade.
- New evidence from magnetic resonance imaging (MRI) studies indicates that the changes in the brains of children with autism spectrum disorder leading to brain overgrowth can be detected by 6 to 12 months of age. Dysregulation of the prefrontal and temporal lobes of the brains in children with autism spectrum disorder actually occurs much earlier and during pregnancy.
- When public confidence in the MMR vaccine wavered in the 1990s, vaccination rates dropped and measles cases increased, leading to many hospitalisations and some deaths.

Links to information:

On the whistleblower conversations:

<https://sciencebasedmedicine.org/vaccine-whistleblower-bj-hooker-and-william-thompson-try-to-talk-about-epidemiology/>

Hooker's 'reanalysis':

<https://epidemiological.net/2014/08/24/directed-acyclic-graphs-and-the-mmr-vaccine-doesnt-cause-autism/>

Autism spectrum disorder: if not vaccines, then what?

<https://peterhotez.org/2017/02/24/autism-spectrum-disorder-if-not-vaccines-then-what/>

The "Why Vaccines Don't Cause Autism" Papers

<https://peterhotez.org/2017/01/20/the-why-vaccines-dont-cause-autism-papers/>

Testimony to House Government Reform Committee on MMR and Autism

http://www.pkids.org/immunizations/vaccines_safe_choice/dr_offit_testimony.html

Film review of vaxxed

<http://www.hollywoodreporter.com/news/anti-vaccine-doc-vaxxed-a-882651>