

Vaccines: two centuries of scepticism

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Wariness and outright hostility to vaccines did not start with COVID-19 but date back to the 18th century when the first shots were given.

From real fears sparked by side effects to fake studies and conspiracy theories, we take a look at anti-vax sentiment over the ages:

1796: First jab, first fears

Smallpox killed or disfigured countless millions for centuries before it was eradicated in 1980 through vaccination.

In 1796 the English physician Edward Jenner came up with the idea of using the milder cowpox virus on a child to stimulate immune response after he noticed milkmaids rarely got smallpox.

The process—coined "vaccinus" by Jenner (from cow in Latin)—was successful, but from the outset it provoked scepticism and fear.

One cartoon in 1802 showed vaccinated people turning into monsters that were half man, half cow.

Before Jenner, a riskier method of inoculation known as "variolation" existed for smallpox, introduced to Europe from Ottoman Turkey by the English writer Lady Mary Wortley Montagu.

Dried smallpox scabs or fluid from pustules were injected or rubbed into cuts on the skin. The resulting infection was usually mild but gave the person immunity.

1853: Mandatory shot

Britain became the first world power to make the smallpox [vaccine](#) compulsory for children in 1853, following the example of Bavaria and Denmark, who introduced mandatory jabs more than three decades before.

Just like today, it triggered strong resistance.

Opponents objected on religious grounds, raised concerns over the dangers of injecting animal products, and claimed individual freedoms were being infringed.

Such was the clamour that a "conscience clause" was introduced in 1898 allowing sceptics to avoid vaccination.

1885: Pasteur and rabies

At the end of the 19th century, the French biologist Louis Pasteur developed a vaccine against rabies by infecting rabbits with a weakened form of the virus.

But again the process sparked mistrust and Pasteur was accused of seeking to profit from his discovery and for creating a "laboratory rabies".

1920s: Vaccines' heyday

Vaccines flourished in the 1920s—shots were rolled out against tuberculosis with the BCG (1921), with vaccines for diphtheria (1923), tetanus (1924) and whooping cough (1926) also developed throughout the decade.

It was also when aluminium salts began to be used to increase the effectiveness of vaccines.

But more than half a century later these salts became the source of suspicion, with a condition causing lesions and fatigue called macrophagic myofasciitis thought to be caused by them.

1998: Fake autism study

A study published in top medical journal The Lancet in 1998 suggested there was a link between autism and the measles, mumps and rubella shot—known as the MMR vaccine.

The paper by Andrew Wakefield and colleagues was revealed years later to be a fraud and retracted by the journal, with Wakefield struck off the medical register.

Despite subsequent studies demonstrating the absence of any such link, the bogus paper is still a reference for anti-vaxxers and left its mark.

Wakefield's study re-emerged in the United States in 2016 in a controversial conspiracy theory film called "Vaxxed".

Measles killed 207,500 people in 2019, a jump of 50 percent since 2016, with the World Health Organization warning that vaccine coverage is falling globally.

2009: Swine flu scare

The discovery in 2009 of "Swine flu", or H1N1, caused by a virus of the same family as the deadly Spanish flu, caused great alarm.

But H1N1 was not as deadly as first feared and millions of vaccine doses produced to fight it were destroyed, fuelling mistrust towards vaccination campaigns.

Matters were made worse by the discovery that one of the vaccines, Pandemrix, increased the risk of narcolepsy.

Of 5.5 million people given the vaccine in Sweden, 440 had to be compensated after developing the sleep disorder.

2020: Polio conspiracy theories

Eradicated in Africa since August 2020 thanks to vaccines, polio is still a scourge in Pakistan and Afghanistan where the disease—which causes paralysis in young children—remains endemic.

Anti-vaccine [conspiracy theories](#) have allowed it to continue to destroy lives.

In Afghanistan, the Taliban were against vaccine campaigns, calling them a Western plot to sterilise Muslim children.

However, when they returned to power last year they decided to cooperate with the WHO and UNICEF.

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