

Edward Jenner & The Smallpox vaccination By Joanna Dougan



Who was Edward Jenner?

Edward Jenner was an 18th Century doctor who developed the world's first ever vaccine.

His vaccine was for a deadly, infectious disease called smallpox.

In the 1700's thousands were dying every year from smallpox

Even if people survived they could severely disfigured or even blind.

At the time the only way to prevent smallpox was through inoculation, which was very expensive and very dangerous.



What was inoculation?

In the 18th Century the rich people would have themselves and their children inoculated against smallpox

This meant a doctor spreading pus from a smallpox pustule, (sore), into the patient's body through a small cut

The patient would then hopefully catch a mild dose of smallpox which would stop them catching it seriously.

However, this was really dangerous because sometimes patients got a serious dose of smallpox

Inoculation could even cause outbreaks of smallpox which would infect a whole area.

What did Jenner do?

As a country doctor Jenner knew that milkmaids who got cowpox, a very mild disease, didn't catch smallpox. However no one had made this knowledge widely known or ever tested out the theory.

In 1796, Jenner experimented on eight-year-old James Phipps. Jenner inserted pus taken from a cowpox pustule and inserted it into a cut on the boy's arm.

A few weeks later, Jenner infected the boy with smallpox, but he did not get ill.

Jenner proved that having been given cowpox Phipps, was immune to smallpox.

He infected and then tested more locals and in 1798, the results about the vaccination were published in a book and Jenner called his method a vaccine, because the word for cow in Latin is 'vacca'.

What happened next?

Jenner had found a cheap and efficient way to protect everyone from a terrible disease. He should have been praised but in fact he was criticised.

People said he needed more proof but the problem was that Jenner didn't know what caused smallpox or why his vaccination worked.

In the 18th century people did not know about germs

Jenner didn't understand that what he was doing was introducing a small amount of the microbe that caused cow pox into his patients, enabling them to create antibodies which would stop them from getting smallpox.

What happened to Jenner?

People criticised him a lot

The religious people from the church said that it was ungodly to vaccinate someone with a disease from an animal.

Doctors who used inoculations were making a lot of money and they criticized Jenner because they knew that they would lose their business if everyone got vaccinated.

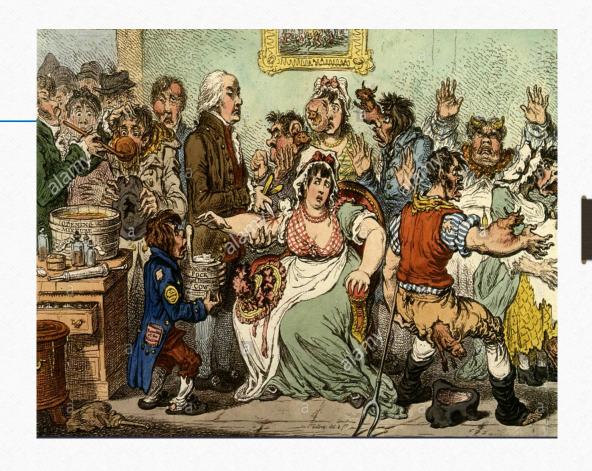
These London doctors said Jenner was just a country doctor with a fairy story

In the end Parliament supported the idea of vaccination, because it was safer, cheaper and more reliable than inoculation, but it took time. Jenner's vaccination was available from 1798 but it wasn't until 1840 that vaccination against small pox was made free for babies and compulsory in 1852.

It wasn't until 1871 that the British government began to enforce the compulsory vaccination.

Even though it took time, millions of people worldwide have been saved through Jenner's work.

This is a cartoon showing people turning into cows because they have had the smallpox vaccination. People laughed at Jenner but he was right.



Vaccination

Nowadays we know that a vaccination is when a small, weakened amount of a disease is given so that the patient's immune system can develop an immunity to that disease.

