

## Why We Need to Stop Listening to Anti-vaxxers

Hello, I'm Lola, and today I want to talk to you about the importance of vaccinations and why we need to stop listening to anti-vaxxers.

Having studied GCSE and A-level Biology, as well as GCSE History of Medicine, I am always shocked at how people can be against vaccines. According to the World Health Organisation, vaccines saved at least 10 million lives from 2010 to 2015. So why is it that one sixth of British people are scared of these vital lifesavers?

The problem is that people are listening to lies on social media, opinions generated by fake news and fear of the unknown, rather than scientific knowledge based on over 300 years of research.

Firstly, there is no evidence to say that vaccines are dangerous. The "anti-vaxxer" movement was triggered in 1998 when Dr Wakefield published a report in a respected medical journal that appeared to show a link between the MMR vaccine and children developing autism. However, he used a very small sample size of only 12 children and twisted the data to create the best possible headlines and financial gain for himself. His results have been proved to be inaccurate and false by numerous investigations since.

Secondly, there is plenty of evidence to show that vaccines do prevent infectious diseases spreading and therefore save lives. I want to tell you about Edward Jenner who discovered vaccines in 1796, using a slightly unethical but very effective method. After noticing that milkmaids, who were in close contact with cows, were not developing smallpox, despite it being very prevalent at the time, he injected a local boy, James Phipps, with cowpox, which is harmless to humans. Seven days later he then injected him with smallpox. This normally dangerous disease caused no symptoms. Since then, smallpox has been completely eradicated from the UK by vaccinations, alongside other communicable diseases which, at the start of the 20<sup>th</sup> century were the main cause of childhood deaths. If we had no vaccinations, every year would be like 2020, as people tried to avoid getting infected by what are now historical diseases.

To get you to think about how this applies to our lives today, I want to do a bit of a thought experiment, using the example of Covid-19. First of all, I want to give you a few seconds to think about how having a vaccination might hurt you. Think back to year 9 when you were given the 3-in-1 vaccine.

You probably thought of the pain in your arm, at the very worst feeling like you were going to faint. But you probably got a biscuit if that was the case.

Now think about the harm Covid-19 is doing, not necessarily to you, but to others. We, young, healthy people, do not get vaccinated for selfish reasons, but to protect the few members of our society who *cannot* be vaccinated due to allergies. The great thing about vaccinations is that they allow for herd immunity: if a high enough percentage of the population get vaccinated, the disease cannot spread to the very few who are not immune as not enough people will be infected. So, I want you to think for a few seconds about the harm that Covid-19 is doing to vulnerable people across the world.

This time you were probably thinking about over-filled hospitals, ventilators and mass graves.

This thought experiment illustrates my point: when a Covid-19 vaccine is developed, there is no reason to be afraid of it, but every reason to take responsibility and get vaccinated. We need to

encourage others to be vaccinated and we need to stop the spread of fake news. And if people refuse, I think the government has every right to make it compulsory, purely to save lives. It's time to stop listening to unfounded fake news and start listening to science.

Thank you.