Vaccines: Meaning, Features, Link With Autism

Vaccines provide immunity against several diseases. Like most medical treatments, vaccinations do not come without risks. The Centers for Disease Control and Prevention (CDC) say that vaccines carry the risk of causing a life-threatening allergic reaction. Although, such risks are very low, and vaccinations have been shown to be a safe way to treat the body against dangerous diseases. According to the American Academy of Pediatrics, most childhood vaccinations are around 90 to 95 percent safe in preventing diseases. The CDC says that between the years 1994 and 2014, more than seven hundred thousand children were left uninjured from death as a result of childhood vaccination, while more than three hundred million children were prevented from catching deadly diseases over the same span (Vaccination).

While most parents do vaccinate, the number who do not has quadrupled in the time since the false claims about vaccines were first released, according to CDC data. This has caused an unnecessary public health crisis in parts of the United States. For example, unvaccinated kids may get measles, mumps, or pertussis. In 2000, the United States believed measles had been wiped out within the country. Measles have since unfolded in the United States. Unvaccinated tourists from other countries can bring it into the United states. They can infect unvaccinated locals. These diseases still exist, even if they are rare. Also, in rare cases, vaccines have been linked to deafness, seizures, coma, brain damage, blood disease, and death (mayoclinic).

Vaccinations have become such a controversial topic in the united states. Around 1998, Dr. Andrew Wakefield made a claim that showed a link between vaccines and autism. He published a paper in the medical journal “Lancet” stating that eight children showed signs of autism days after being vaccinated for measles, mumps, and rubella. Investigations to Wakefield's claim showed that his claim was false. Because of Wakefield’s dishonesty ad irresponsibility, millions of children aren't getting vaccinated for the false claim that vaccines cause autism. Around one in every five people believe that 'some vaccines cause autism in healthy children'(caring for kids), and 38 percent are unsure whether it is true or not. According to Alice Park it took nearly six months for Wakefield’s license to practice medicine to be revoked in the United Kingdom.

So why do one in every five people still believe that there is a link between vaccines and autism? To begin, it is still a highly controversial issue and it requires an understanding of why they can’t be linked to each other. In addition to this, people tend to treat information differently at high emotional states when it comes to their kids. The media also plays a big part in this as well by keeping fake news alive. Stories stick with us, and there are a lot of individual case study claims in the vaccine–autism link. Cass Sunstein has called this “asymmetrical updating”, where people take the information that fits with their own personal view and they tend to ignore the evidence that is provided (news/health).

In 2010 the CDC reported sixty-three cases of measles in the United States. In 2018, it reported three hundred seventy-two cases of measles. Between January 1and April 1, 2019, four hundred and sixty-five cases of measles were reported (frontiersin). On the other hand, many studies have shown no link between autism and the use of vaccines. As a matter of fact, the United States, the Food and Drug Administration (FDA) requires a minimum of ten years of testing for all vaccines before allowing them to be licensed and used on the general public.

According to ProCon.org, many people say that vaccines can cause significant and sometimes deadly side effects. Even though this is rare, The American Academy of Pediatrics states that 'most childhood vaccines are 90%-99% effective in preventing disease". In addition to this the Centers for Disease Control (CDC) estimated that 732,000 American children were saved from death and 322 million cases of childhood illnesses were stopped between 1994 and 2014 because of vaccinations (vaccines/childhood). Advocates say that vaccination is safe and one of the greatest health developments of the 20th century. They also point out that illnesses, including rubella, diphtheria, smallpox, polio, and whooping cough, are now prevented by vaccination and millions of children's lives are saved.

Some anti-vaxxers like to argue that some of the elements in vaccines are "toxic and can be harmful to the human body"(vaccines debate). For example, one flu vaccine contains small amounts of mercury, while other vaccines are known to include such chemicals as aluminum and formaldehyde, which all may cause side-effects in large doses but patients that are given these vaccines aren't being harmed since they aren't taking large doses. For other anti-vaxxers, the issue is that they do not believe that the government has the right to make decisions about what chemicals should be put inside the human body. I agree with this statement to an extent. I also don't think the government has the right to tell you what to do with your own body except when you're likely to harm other people then you must think of others as well.

In some cases, people choose not to vaccinate due to religious reasons. According to the first Amendment of the United States these rights can't be violated. The reason this is a problem is because if you are allowing too many people to be exempt from being vaccinated then you increase the risk for infection for other people. An increase in the demand for religious exemptions from student vaccination requirements by parents has risen drastically in the span of twenty years. In the twenty-year period between 1991 and 2011, the average state-level religious exemption rate has almost doubled from 0.98 percent of the population to 1.8 percent. As of 2018, the vaccination rate was about 95 percent nationwide (vaccine debate). To try and avoid increasing these numbers, many states are moving to make religious exemptions more difficult to obtain. Some states have even eliminated nonmedical and religious exemptions completely.

Recently, outbreaks of measles, polio, pertussis, and rubella have been documented in areas with high rates of unvaccinated children. This shows that certain diseases believed to have been eliminated by vaccines are making a comeback due to the increase of unvaccinated kids. A 2012 study by Saad Omer, professor of public health at Emory University, found that states that allow easy exemption from mandated vaccination have higher opt-out rates: Opt-out rates in states that allow philosophical exemptions are 2.5 times higher than in states that only allow medical and religious exemptions (vaccine impact).

Even though there are a lot of parents who don't vaccinate their kids, most parents in the United States choose to have their kids vaccinated. Their reasoning behind this decision is that the benefits of vaccination outweigh any risks that come with not being vaccinated. Benefits include protecting children from contracting certain preventable diseases as well as improving overall public health. Not only are kids protected from these diseases, but they won't spread it since they aren't unvaccinated(vacicine-dangers). Now it is mandatory for kids too have been vaccinated in order to attend a public school.

In 1905, the US Supreme Court ruled that it should be mandatory to be vaccinated to protect

public health. As of right now no US federal vaccination law exists but all the 50 states in America have laws requiring kids to be vaccinated in order to attend public school. Vaccines are given to kids from birth. According to the vaccine debate, “Vaccines are given in childhood to help protect their young immune systems against a range of potentially deadly diseases” (vaccine debate). Going against vaccinating your kids will only harm them.

Vaccines teach our body to recognize new diseases that we may encounter in our lives. Although they might have some rare side effects, vaccines have gone through many tests to prove that they are safe. Most of the time if someone does experience a side effect it is mild. Some mild side effects would be swelling in the injection site or a low fever(vaccine debate). Plus, if someone is pregnant, they should also get vaccinated because it comes with many benefits. Not only does it protect the women carrying the baby, but it also provides immunity to the baby. The CDC recommends women who plan to become pregnant receive an MMR vaccine before becoming pregnant. If they don’t some diseases can cause them birth defects or even a miscarriage.

Vaccines have been nothing but successful worldwide. They have decreased polio cases by more that 99 percent since 1988, according to the world health organization. Vaccines also prevent 2 to 3 million deaths every year according to the world health organization as well (medicine/divisions). Not only can vaccines save lives, but it can also save families money. If a child doesn’t get vaccinated and then encounters a disease not only will that child's life be at risk, but the average family might go into serious debt trying to pay the medical bills. Another reason vaccine should be mandatory is because it will protect future generations from diseases that no longer exist because of vaccines.

Some anti-vaxxers argue and say that God put us on this earth without vaccines and that our body is made to fight off diseases (vaccine debate). This would have been true a long time ago but now most diseases are manmade, and we must protect ourselves from it. So, what would happen in a world without vaccines? Well many diseases that were nearly gone would all come back in an instant. A lot more people would get very sick and people with weak immune systems like cancer patients would fall very ill and eventually die. So why would somebody decide not to get vaccinated or even not vaccinate their kids with all these risks? Possibly because they aren't aware of all the risks that come with not being vaccinated. Anti-vaxxers also like to argue that vaccines are unnecessary, ineffective, and dangerous. But a closer look at scientific evidence shows that this is not the case.

In conclusion, the vaccination debate is afflicted with many conflict and contradictions. However, with careful research and evidence anyone can see what the right decision is when it comes to being vaccinated or not. Not only does science show the advantages of being vaccinated but history has a major part as well in showing what it's like in a world without vaccines. Misinformation about vaccines is the main cause of fear that drives people to refuse being vaccinated. Not only are they potentially harming themselves when they do that, but they are also harming the people around them and possibly even their future ancestors as I mentioned earlier. That is why vaccines should be mandatory for everyone.

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