

Vaccines and misinformation surrounding them



- Celeste Clark

An Argumentative Exploration into Vaccines and Misinformation Surrounding Them: TL; DR, Vaccination and Autism Have No Correlation

Since the late 1990's, myths about the risk of a link between standard infant vaccination and those administered being autistic as a result, as well as general superstition or skepticism over the effectiveness and safety of vaccines, have been perpetuated and grown in popularity. So much so, that the president (at time of writing, Donald J. Trump) has questioned their safety, potentially putting millions of lives at risk. Vaccination is important for the health and well being of a community, as well as the human race, and should not be disputed. The belief in the chance of developing autism from vaccination is a harmful conviction to autistic people and children who don't get vaccinated because of their parent's irrational fear that says, through their actions, " I would rather my child die of a preventable disease than have a disorder." Especially in the current climate of " alternative facts" and conflicting information, it is imperative one should mold their beliefs to fit the facts, *not* mold the facts to fit their beliefs.

Firstly, the positive (a double-meaning here of *favorable* and *certain*) effects of vaccination. On the authority of the CDC (Centers for Disease Control and Prevention),

Although children continue to get several vaccines up to their second birthday, these vaccines do not overload the immune system. Every day, your healthy baby's immune system successfully fights off millions of antigens-the parts of germs that cause the body's immune system to

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respond. The antigens in vaccines come from weakened or killed germs so they cannot cause serious illness. Vaccines contain only a tiny amount of the antigens that your baby encounters every day, even if your child receives several vaccines in one day.

People are usually vaccinated when they are very young, since their immune systems are weak and not well developed. At their young age, they have a higher risk of contracting and failing to successfully combat diseases they come in contact with.

The process of developing and testing vaccines begins with a laboratory, continues with clinical trials, and ends with the FDA (Food and Drug Administration), who must approve a vaccine, its safety, and its effectiveness before its distribution and use in the United States. It is such a controlled and extensive process, it typically takes 10 to 15 years of research and testing before the vaccine is presented to, and approved or rejected by, the FDA.

Vaccines, in their preventative nature, will likely seem to have a lack of effects to the person they are administered to-e. g., Person A gets vaccinated and nothing changes. Their life goes on as normal, and they do not notice that they have not come down with the disease that the vaccine counteracted. However, Person B was not vaccinated, gets the disease, and feels the full effects of what the vaccine silently prevented in Person A. For such a simple, quick procedure with a low-profile effect, it's incredible the positive response it can have on an individual and a community. That,

coupled with the fact almost all insurance covers it, makes it seem rather appalling more people fail to take advantage of it.

An adverse event is, essentially, a coincidence; a health problem that occurs following vaccination that possibly could be induced by a vaccine. A side effect is a reaction shown to correlate to a vaccine by scientific studies and tests. The difference between adverse events and side effects is significant, especially in an argument as controversial and serious as this. It is important to recognise that personal anecdotes are not evidence. Adverse events reported to the VAERS (Vaccine Adverse Event Reporting System) are not necessarily side effects caused by vaccination.

Vaccines do not affect or alter genes in any way, and gene mutation is what most likely causes autism, stated here by the Autism Society,

There is no known single cause for autism spectrum disorder, but it is generally accepted that it is caused by abnormalities in brain structure or function. Brain scans show differences in the shape and structure of the brain in children with autism compared to in neurotypical children.

Researchers do not know the exact cause of autism but are investigating a number of theories, including the links among heredity, genetics and medical problems.

In many families, there appears to be a pattern of autism or related disabilities, further supporting the theory that the disorder has a genetic basis. While no one gene has been identified as causing autism, researchers are searching for irregular segments of genetic code that children with autism may have inherited.

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Autism is a developmental disorder, a broad spectrum of different symptoms and traits, found in people of all races, genders, ages, etc. It is becoming more commonly diagnosed due to increased knowledge. It is not a disease, nor is it curable or caused by vaccines. This quote from the article *Vaccines Don't Cause Autism, but That's Not the Point* by Leslie Waghorn explains the moral wrong of accusing vaccination of provoking autism, and how it affects autistic people:

. . . The panel discussion being broadcast was teens and adults with autism and how federal funding could better support them. As the show closed, the moderator asked if anyone on the panel felt a vaccine had caused their autism.

Silence.

One teen panelist spoke up, “ no, but it hurts that you would ask that question.”

The moderator’s tone softened, he apologized and asked why.

. . . As I recall his response was, “ because it makes me feel like I’m damaged or broken, when I’m not. I was born this way. My brain just works differently than most other people’s. When people talk about vaccines and autism it makes me feel like I’m not a person but a ‘ bad result.’ It reminds me that no one wants a kid like me and parents will risk their kid’s lives and everyone else’s just to make sure their kid doesn’t turn out like me.”

Even if vaccines *did* cause autism, it isn’t a death sentence. Vaccine-preventable diseases can be. Children are not better off dead than disabled.

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