

Good example of research paper on the relation between autism and measles mumps a...

[Family](#), [Children](#)



\n[[toc title="Table of Contents"](#)]\n

\n \t

1. [Against MMR vaccination](#) \n \t
2. [In support of MMR vaccination](#) \n \t
3. [Discussion](#) \n

\n[/toc]\n \n

Autism is a developmental problem that is mostly detected in early childhood. The exact cause of this disease is not identified, but many possible triggers have been thought to be the risk factors. Despite the countering researches, many people still believe that measles, mumps and rubella vaccinations (MMR) have the tendency to expose children to the risk of autism. The inconclusive facts on both sides, supporting and negating the connection of autism to vaccinations had been leading the public to make wrong decisions. Nowadays, many researches are condemning those against MMR vaccines and say the vaccine's benefit outweighs its minor side effects. On the contrary, others studies conclude that MMR vaccines have long term side effects, and autism being the major one amongst them. Therefore, this paper will discuss both perspectives and give personal suggestions which side presents more credible facts on the issue.

Against MMR vaccination

Vaccines are given to children at early age in order to prevent the risk of future health complications. Thanks to many of these vaccines the health care system is now able to eradicate some of the major diseases and control

other life-threatening ones. Many vaccines including measles, mumps and rubella (MMR) are given to children around infant and toddler age. These vaccines have been the major source of controversy since 1998, when Andrew Wakefield and his team indicated a possible relation between the MMR vaccine and autism (1. Vaccination and autism 10 years on: why are parents still worried?).

Autism was first discovered by Leo Kanner in 1943. Its prevalence was not that much visible before the 1970s, but the ratio grew from 1 in 10, 000 to 1 in 150 around 2008. Even if the exact cause of autism is not identified, factors like thimerosal preservative found in MMR vaccines have been suggested as a trigger (The History of vaccinations in the light of the autism epidemic). The fact that the symptom of autism is detected closer to the age when MMR vaccination is given seems to a source of confusion. Due to this, many parents who abstained from taking their children for vaccination lead to a sharp rise in the incidence of measles, mumps and rubella.

For genetically predisposed children, the thimerosal preservative in MMR and the oxidative effect of metals result in the inflammation of brain cells, gastrointestinal tract and immune system, some of which were observed on autistic children. In California, the number of autistic children with the above mentioned symptoms started to decline as the toxic metals and thimerosal preservatives were removed from MMR vaccines (The History of vaccinations in the light of the autism epidemic). In order to ascertain the side effect of MMR, Macaque monkeys were given age adjusted dose of the vaccine with thimerosal preservative. The longitudinal study displayed that the experimental group of monkeys showed certain behavioral and

developmental abnormalities that mimic autism (The History of vaccinations in the light of the autism epidemic) All in all, these researches had a wide media coverage in Europe and North America, resulting in the formation of a counter-group of researchers claiming to falsify the allegations against MMR vaccines.

In support of MMR vaccination

On the other hand, most of the researches that support early childhood vaccinations begin by questioning the ethical values and accuracy of the studies made against MMR vaccines. The first researcher who connected autism to MMR only had 12 purposefully selected autistic children as samples (Lancet retracts 12-year-old article linking autism to MMR vaccines). The research was also funded by people who are in lawsuits with MMR vaccine producers, which puts its credibility in question. The British Medical Council also ruled that the research against MMR vaccines by Wakefield was unethical, showed disregard for the participants and was inconsiderate of the future risks.

A research in Denmark tells, measles, mumps and rubella vaccine was first introduced to Danish children in 1987, but the rise of autism only came after mid 1990's. In order to discover if this fact was due to better diagnosis of autism in the 1990's or the nonexistent correlation between autism and MMR, the study used almost half a million samples of children. The risk of being autistic for vaccinated children was found to be equal to the non-vaccinated children. It also confirmed that providing MMR vaccines as a group, and the age at which children receive vaccine has no effect on the

risk of being autistic. (MMR vaccine is not linked with autism, says Danish study).

A research was done in Japan, which was thought to be one of the most convenient countries to evaluate the relation of MMR and autism due to two factors. First, parents in Japan were not exposed to biased media reports, so they were thought to evaluate their children correctly. Secondly, Japan gave the advantage of evaluating autism pre, post and during vaccination, since MMR was given only for children born between 1985 and 1991 (MMR-vaccine and regression in autism spectrum disorders: Negative results presented from Japan). This research concluded by disclosing that no relationship exist between the MMR vaccine and autistic regression for all the three periods. The risk of acquiring autism was also found to be equal for all participants in all the three periods of the study.

Discussion

Before deciding if any of these opposing researches are right or wrong, it is necessary to observe both perspectives. It is known that preservatives in MMR vaccines might have some short-term benign side effects. One of six children might get fever and 1 in 3, 000 might get a fever-triggered seizure. As of the facts, it would be hard to conclude that life saving vaccines like MMR are the source of autism with only few purposefully selected samples in a country where 600, 000 children take MMR every year (Is the MMR vaccine safe?). Ever since the discovery of this vaccine millions of children have taken it and it has saved lives all over the world. With the growing level of technology, researches have also shown a growing number of proofs that

support the vaccine, while rejecting Wakefield's conclusion. Therefore, after observing both sides, it will be the recommendation of this paper to provide MMR vaccine for children. Health care organizations should also work towards family and community level health teachings in order to revert the wrong belief about MMR vaccines and save children.

All in all, any health-related researches should be evaluated for conflict of interest and credibility before publicising findings. Due to Wakefield's inconclusive research many children have passed without taking MMR vaccine. For non-vaccinated children, there will be a high risk of being exposed to measles, mumps and rubella in later life. Considering the risks and benefits of withholding MMR vaccine, it should be one of the top priorities of the health care system to provide MMR to children at the appropriate age. Moreover, future care researchers should learn corresponding lessons from such research practises to avoid mistakes and casualties.