## No link between autism and vaccination

Health & Medicine



According to the WorldHealthOrganization and the American Psychological Association, autism is a developmental disability, manifesting itself before the age of three, and resulting from a disorder of the central nervous system. The developmental disability is diagnosed with the use of specific criteria for impairments in the areas ofcommunication, basic social interaction, the interests of affected individuals, and their imagination as well as activities. Autistic children are known to be slow at basic processes like language acquisition that healthy children are known to learn quickly ("Autism").

The causes of autism are controversial, which is why it is possible for people to formulate a host of theories on the causes of this developmental disability ("Autism"). A British study published in February 1998 was misinterpreted by countless people who believed that the data provided proof that the measles, mumps, rubella (MMR) vaccine was responsible for autism in children. The study was conducted by a team of thirteen scientists with Dr. Andrew Wakefield of Oxford University as the team leader.

After it was discovered that parents had begun to fear the MMR vaccine because a debate had been waged with regards to the data presented in their study, ten of the thirteen authors of the study report made the following statement which was published on the BBC website: "We wish to make it clear that in this paper no causal link was established between MMR vaccine and autism, as the data were insufficient" (Jackson).

The demand for vaccination fell in the United Kingdom after the data in the above mentioned study had been misunderstood, and the misinterpreted

information had been publicized. This meant that children could no longer be protected from measles, mumps, and rubella. In point of fact, it was found that a significant number of families had entirely given up on the idea of vaccination for their children.

Some parents had opted for single vaccines rather than the MMR at the time, but health organizations and the UK government warned that even single vaccines put children at risk (Burke). What is more, even some doctors in the United States had begun to believe that the MMR vaccination was responsible for autism. Globalizationhad spread the rumor overseas.

According to Dr. Mary Megson from Virginia,

The segment of children with "regressive autism," the form where children develop normally for a period of time then lose skills and sink into autism, most commonly at 18-24 months of age, is increasing at a phenomenal rate. I am seeing several children in the samefamilyaffected, including in the last week four cases of "autistic regression" developing in four-year-old children after their MMR and DPT vaccination. In the past, this was unheard of.

Thedoctorfrom Virginia advised that the implementation of safe vaccine policies should become a first priority, seeing that vaccination cannot be kept away from children (Megson). The doctor had believed that there was definitely a link between autism and vaccination. As a matter of fact, many doctors believed what Dr. Megson had believed. This is because the link between MMR vaccination and autism was that of "coincidental-timing." In other words, the symptoms of autism began to occur around the same time as the vaccination.

Hence, parents began to falsely believe that the vaccine was indeed responsible for autism. Dr. Ken Haller, who works as a primary care pediatrician with the Cardinal Glennon Children's Hospital explained the false belief thus: "When something terrible happens to a child, everyone wants a reason for it... As a physician, it's very difficult for me, when I see a kid who's diagnosed with autism or a seizure disorder, to say we have no idea why this happened. But people want to grasp onto something; that's human nature. (Jackson)"

The "insufficient" data in the study conducted by Dr. Wakefield and his colleagues could not find a link between autism and vaccination. So, two different groups of investigators in the United States attempted to find out whether there was truly a link between autism and vaccination. Dr. James A. Kaye and his colleagues at the Boston University used the United Kingdom General Practice Research Database to find out whether 254 boys suffering from autism in their study were actually suffering because of MMR vaccination.

Dr. Loring Dales and her colleagues at the California Department of Health Services in Berkeley performed a similar study during the same time. Both of these studies eventually showed that there is no link whatsoever between autism and vaccination. The results of both of these studies actually showed that while the use of vaccination remained constant over time, the cases of autism increased dramatically among children without vaccination being responsible for the increase (Kubetin).

Although it had already been clearly proven that there is definitely no link between autism and vaccination, the developed world where the debate on autism and vaccination had been waged was seeking a truly comprehensive study to show whether there really is a link between autism and vaccination, or not. K. Madsen, A. Hvii, and M. Vestergaard report on exactly the kind of study that was being sought and finally conducted on Danish children:

This is the most direct evaluation of whether MMR causes autism published to date. Though all epidemiological studies conducted in recent years have found no association between the MMR vaccine and onset of autism, design limitations have left some doubt about this issue. This historical cohort included all Danish children born between 1991 and 1998 when prevalence rates for autism and autistic spectrum disorders were increasing. Because of the thoroughness of the Danish system of registration, ascertainment of vaccination status and health problems was remarkably accurate and complete. Since the cohort was composed of the entire population, both vaccinated and unvaccinated children had the same risk of autism prior to exposure to the vaccine. Nearly all children were accounted for at the end of the study period. Specialists using the samediagnosticclassification system made the diagnosis of autism in a uniform manner.

No doubt, this was the comprehensive study with 'sufficient data' that parents were seeking the results of. The design of the study was virtually immaculate. Most importantly, the study showed once again that there was no difference in the risk of autism in the children that were vaccinated verses those that were not vaccinated. Moreover, the cases considered as part of the study were not clustered at any point after the immunization. Madsen et https://assignbuster.com/no-link-between-autism-and-vaccination/

al. report that the registry data that was used did not contain information on children that were suffering from developmental regression. Hence, the issue that there might be children who show vulnerability to vaccination, could not be ruled out. If there is a group of such children, the risk for vaccinated children would be greater than 1. However, the opposite turned out to be true – that is, there is definitely no risk of autism in children especially because of vaccination.

Because the size of the sample of children studied was extraordinarily large, and there was no evidence to show that there is a link between autism and vaccination, Madsen et al. concluded that parents should fearlessly continue to vaccinate their children in order to avoid future outbreaks of disease. Given that parents had previously only trusted false interpretations of the British study that had seemed to show a link between autism and vaccination, it is now time to give up the false belief entirely. Scienceis based on real facts, which is why we all trust scientific information.

We have been shown through several studies that there is certainly no link between autism and vaccination. There have been more studies of the same kind with the same results that we have not discussed. Future studies may similarly show that there is no link between autism and vaccination. Even so, parents cannot keep their children from immunization waiting for future studies of the same kind, churning out the same results. The future of children is at stake without vaccination. The scientific evidence that has been found thus far is sufficient.

## **Works Cited**

- 1. "Autism." (2007). Wikipedia. Retrieved from http://en. wikipedia. org/wiki/Autism. (4 April 2007).
- 2. Burke, Maria. "Every parent's choice? Autism and vaccination -- the jury's out." Chemistry and Industry (2002, February 18).
- 3. Jackson, Harry Jr. "Debate on autism and vaccination started after British medical study." St. Louis Post-Dispatch (2004, May 28).
- 4. Kubetin, Sally Koch. "MMR Vaccination Not Tied to Rise in Autism Rate." Clinical Psychiatry News (2001, July 1).
- 5. Madson, K., A. Hvii, and M. Vestergaard. "There is little evidence that combined vaccination against measles, mumps, and rubella is associated with autism." Evidence-Based Mental Health (2003, May 1).
- Megson, Mary. "Autism and Vaccinations." The Weston A. Price Foundation (2004, March 16). Retrieved from http://www. westonaprice. org/children/index. html. (3 April 2007).