

Andrew Wakefield and the MMR Vaccination Controversy

This information sheet seeks to explain Andrew Wakefield's role in the MMR vaccination controversy and the reaction that followed from his 1998 publication in *The Lancet*.

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Background

Through a series of publications between 1995 and 2000, Andrew Wakefield, a former British surgeon, argued that the MMR vaccine caused a new disease, autistic enterocolitis. Wakefield and other researchers were investigating increasing rates of Crohn's disease and colitis among children. However, Wakefield's 1998 study is often credited with igniting the modern MMR vaccine controversy because it prompted Wakefield's public declaration that the vaccine may cause autism. Although this study has since been retracted, it continues to have a significant impact on the public's beliefs about the MMR vaccine.

The Wakefield Study

In 1998, Wakefield and twelve colleagues published a paper entitled "Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children," which studied twelve autistic children. Wakefield collected case histories as well as blood tests, colonoscopies, and spinal fluid from his subjects, and his findings revealed that eight of these children had the MMR vaccine shortly before experiencing developmental delays. Shortly following the paper's publication in *The Lancet*, Wakefield held a press conference where he openly withdrew his support for the "triple-jab" MMR vaccine. Wakefield expressed his belief that the "triple-jab" version of the vaccine could affect children's immune systems. Wakefield theorized that the measles virus in the vaccine caused proteins to leak from the intestines and then impair neurons in the brain. Wakefield's publication never claimed that the MMR vaccine caused autism specifically, but he did make this claim consistently afterwards.

Reaction and Retraction

Following Wakefield's study, many parents in the United Kingdom refused to let their children receive the MMR vaccine. This widespread rejection of the vaccine caused the country to experience plummeting MMR vaccination rates, and some areas even lost herd immunity, the percentage of the population that needs to be vaccinated to prevent the outbreak of a certain disease. The study also caused concern in other areas of the world, including the United States.

Wakefield's findings were never replicated and thus never garnered significant support in the scientific community. In addition, research by *The Sunday Times* investigative journalist, Brian Deer, exposed that Wakefield had a conflict of interest at the time of the 1998 study. Deer revealed that Wakefield was paid more than £400,000 by lawyers seeking to prove that the vaccine was unsafe. Wakefield's credibility further diminished in 2004 when ten out of the study's thirteen authors retracted the study's conclusions. The paper was later fully retracted from the *Lancet* in 2010. Also, in 2010, Great Britain's General Medical Council (GMC) revoked Wakefield's license claiming that his conduct was "irresponsible and dishonest."

Resources

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