

## Antivaccine hero Andrew Wakefield: Scientific fraud?

Posted by David Gorski on February 8, 2009

Pity poor Andrew Wakefield. Actually, on second thought, Wakefield deserves no pity at all. After all, he is the man who almost single-handedly launched the scare over the MMR (measles, mumps, and rubella) vaccine in Britain when he published his infamous *Lancet* (a medical journal) paper in 1998 in which he claimed to have linked the MMR vaccine to regressive autism and inflammation of the colon, a study that was followed up four years later with a paper that claimed to have found the strain of attenuated measles virus in the MMR in the colons of autistic children by polymerase chain reaction (PCR). It would be one thing if these studies were sound science. If that were the case, then Wakefield's work would have been very important and would have correctly cast doubt on the safety of the MMR. Unfortunately, they were not, and, indeed, most of the authors of the 1998 *Lancet* paper later withdrew their names from it.

Over the next decade, aided and abetted by useful idiots in the media, by British newspapers and other media that sensationalized the story, and the antivaccine movement, which hailed Wakefield as a hero, Wakefield managed to drive MMR vaccination rates in the U.K. below the level of herd immunity, from 93% to 75% (and as low as 50% in some parts of London). As a result Wakefield has been frequently sarcastically "thanked" for his leadership role in bringing the measles back to the U.K. to the point where, fourteen years after measles had been declared under control in the U.K., it was in 2008 declared endemic again.

Worse, this fear was based on the worst science imaginable. First, no scientist not associated with Andrew Wakefield has ever been able to replicate his work. Second, as was exposed by U.K. reporter Brian Deer, not only was Wakefield paid big bucks by trial lawyers seeking to sue vaccine manufacturers for "vaccine injury" to do his studies on autistic children, a conflict of interest he never revealed and that had to be exposed through Deer's investigations, but months before he published his *Lancet* paper Wakefield had applied for a patent on an allegedly safer single measles vaccine that could succeed best if

the safety of the MMR were called into doubt. Even after all of this came to light, leading to Wakefield's correctly being dragged in front of the General Medical Council for charges of scientific misconduct. Even after this, he still enjoys a cult of personality that I can't figure out, and is often portrayed as being "persecuted" by the British medical establishment. Third, was revealed at the Autism Omnibus proceedings when PCR expert Stephen Bustin testified about the shoddy methods at the laboratory used to do the PCR on the colon biopsies. Wakefield's work and ethics are about as bad as it gets.

Confidential medical documents and interviews with witnesses have established that Andrew Wakefield manipulated patients' data, which triggered fears that the MMR triple vaccine to protect against measles, mumps and rubella was linked to the condition.

The research was published in February 1998 in an article in *The Lancet* medical journal. It claimed that the families of eight out of 12 children attending a routine clinic at the hospital had blamed MMR for their autism, and said that problems came on within days of the jab. The team also claimed to have discovered a new inflammatory bowel disease underlying the children's conditions.

However, our investigation, confirmed by evidence presented to the General Medical Council (GMC), reveals that: In most of the 12 cases, the children's ailments as described in *the Lancet* were different from their hospital and GP records. Although the research paper claimed that problems came on within days of the needle injection, in only one case did medical records suggest this was true, and in many of the cases medical concerns had been raised before the children were vaccinated. Hospital pathologists, looking for inflammatory bowel disease, reported in the majority of cases that the gut was normal. This was then reviewed and the *Lancet* paper showed them as abnormal.

The complete story reveals behavior on the part of Wakefield that leaves me just shaking my head in disbelief. It's simply unbelievable.

Sadly, none of this will matter to antivaccinationists, who view Wakefield as exactly that—a persecuted scientific hero. Although I have yet to see any response from antivaccine blogs like Age of Autism, I’m sure that they’ll wax ridiculous about what a great doctor and man Wakefield is and how it’s big pharma (big pharmaceutical/drug companies) and its minions who, frightened by the implications of Wakefield’s work, are working hard to demonize him and suppress his “science.” Unfortunately for their reality-challenged world view, sometimes things are as they appear, sometimes there really is no conspiracy, and sometimes a rat is a rat. And Wakefield is most definitely a rat. A rat who caused thousands of cases of measles and at least one death.

**Respond:**

List out what was scientifically wrong with Andrew Wakefield’s study?

Why do you think Andrew Wakefield has been effective at spreading his message if scientists are so critical of his methods? Why do people worry about the safety and effectiveness of vaccines?

What would it take (scientifically) for us to prove definitively whether vaccines are safe or not?