## A 1000 WORD ESSAY ON THE GIVEN 3RD TOPIC.

Andrew Wakefield and 12 of his colleagues published in "the Lanceta" a case series in 1998 which implied that the MMR vaccine contributes to autism that affects how people interact with others. After a considerable amount of time, medical studies were held and published, disproving the link between the vaccine and ASD (Autism spectrum disorder). The logic that the MMR vaccine may cause autism was also questioned because a link between the two is almost expected. Both of these things are expected only in childhood. The publishing of this research by Andrew Wakefield contributed highly to the use of MMR vaccines since most parents were concerned about the risk of autism after the vaccination was injected.

This ignorance of MMR vaccines led to measles outbreaks in the United Kingdom as well as USA and Canada between 2008 and 2009, therefore, causing harm to the over 200 people and it infected them with measles. 85% of the infected people were the ones who didn't get MMR vaccine. This caused great harm to the scientific cause of medical research too.

A while later, a retraction was made by 10 of the 12 original authors, to the original publication. According to the retraction, no specific connection was found between the MMR vaccine and ASD due to insufficient use of data during the research.

In early 2010, the research was completely withdrawn due to the authors admitting that a lot of elements in this research were incorrect even though the findings of the initial tests reported otherwise. This led to Wakefield being found guilty of fraud for money related benefits since he was massively funded by lawyers who were involved with cases against the companies

which produced vaccines. This also led to Wakefield being held guilty of ethical violations as they had conducted the sampling on children without meeting the compulsory ethical clearances.

The scientific attitude was not applied at all in this case due to the small sample size containing only 12 people: which makes the sample so small that it can merely verify anything at all let alone be this huge research, unchecked design of the experiment and the hypothetical nature of the conclusions made by Wakefield due to him being very biased about not using the vaccines due this his own monetary benefits. He claimed that his research was not selective at all which was in fact very wrong.

Moreover, Wakefield had strong and famous celebrities, such as Jenny McCarthy, a famous model and activist, as his supporter and she used the power of her fame in public to raise voice against the MMR vaccine implying that Wakefield's research was right, which influenced a lot of people.

It was also found that Wakefield paid 5 pounds to each child at his son's birthday celebration so that he could use their blood for his research and that he could mold the results in any way he wanted to.

Investigation for a long period also unveiled that many of the children in this study were suffering from chronic constipation which is associated with ASD but Wakefield never mentioned this information while reporting his data. It was also found that when he sent medical tests for ASD in the children and saw a negative result back he always altered it. He, alongside, was also inventing some diagnostic tools and medicines for his self made non-existing syndrome "autistic enterocolitis". If he was not investigated and stopped back then, there would have been a huge need for such tools and medications because of the terrors he created about MMR.

What he did was very unethical. It very much had no scientific attitude as he attempted a fraud for his monetary interests by putting people's life in danger. He even had no respect for the people who lost their lives by not getting MMR vaccines due to his wrong deliberately spoken words and flawed, altered and biased research.

Till now other researchers have conducted the same study using up thousands of dollars toward this issue, but no authentic link between autism and the MMR vaccine has ever been discovered.

As a reader you can learn that it is an ethical responsibility of the scientists who publish their research study to make sure that the research was conducted and was based upon very solid evidence. Their sample size should be huge to make sure it has higher chances of being authentic. The data collection and data analysis should be very carefully done. Data reporting should include all the results and nothing must be omitted even if it is against the personal expectations of the researcher i.e no biases. There can not be any negligence with such sensitive research because any tiny mistake can cost someone their life and it causes harm to the scientific cause as we can see from what Wakefield had done.

This not only wasted the time but also the money into proving something that was wrong from the very beginning. His behavior was very unforgettable as well as unforgivable because putting the lives of so many people in danger for your personal luxuries is very immoral. He not only was a traitor to those who believed in him but also to science which he used to fool people and got benefit out of it. This kind of attitude is never expected of any scientist and this was indeed a big attempt of felony and treachery in the history of the scientific world.