

“Children don’t act like that.”

These are words that enraged me after someone criticized my autistic brother.

As we looked for snacks down the grocery store aisle, a woman, who didn’t understand autism or stimming, began to judge.

Her words not only hurt my brother, but many others like him who have experienced unwarranted judgment due to lack of understanding regarding autism, or Autism Spectrum Disorder.

The disorder can be characterized as a neurodevelopmental

disorder, meaning that challenges in social communication, interest, and repetitive movements could all be present in an individual with autism. Stimming can be characterized as repetitive movements or actions that are physical, vocal, or objective. Stimming helps individuals with ASD self regulate and focus. These key terms are critical to understanding autism as well as individuals who have the disorder.

As the topic of autism and its etiology continue to make headlines globally, misinformation spreads leading to confusion, stigma, and stereotyping. Sadly, the misunderstanding and misinformation regarding autism is nothing new.

As early as the 1900's mothers were shamed if they had a child with atypical behavior.

This shaming developed a name and a theory: The Refrigerator Mother theory which was established in the 1950s by Leo Kanner and Bruno Bettelheim, accusing mothers of being distant and lacking emotional warmth. This psychoanalytic theory claimed to be the reason for a child's autism. Though this theory may not be as popularized today, mothers are still blamed for a child's atypical behavior, which often creates guilt and shame. 👁️ But blaming a mother for their child's differences is stating the verdict without listening to the case. 👁️

The Refrigerator Mother theory still has some traction in promoting the idea that a missing maternal bond is the nuclear cause of autism.

Though, other schools of thought focus their energies on an external cause: vaccines.

Recently, there have been a spread of anti-vaccination movements gaining traction on social media. According to the Rollins School of Public Health at Emory University, misinformation on social media “...has led to decreased vaccination rates in many parts of the world, including in the U.S.”.

Misinformation about the link between vaccines and autism is still prevalent despite **decades** of scientific research that disproves the claim

that vaccines cause autism. Though the claim has been disproven, measles cases have spiked in the U.S. due to the statements towards the cause of autism and the vaccine.

The notion that the MMR, or Measles, Mumps, and Rubella, vaccine can cause autism was first popularized by a research paper published in 1998 by now-discredited surgeon Andrew Wakefield.

Evidence would show that “Wakefield had been paid by the lawyer of parents whose children had autism and were looking to establish a link

to the MMR vaccine.” Subsequently, the paper was retracted and his medical license was revoked, but many disciples of this theory still hold on to its principle almost 30 years later. This example illustrates how easily misinformation is influenced and disseminated.

Autism Speaks, a foundation supporting autistic individuals and their caregivers, identifies genetic influences and environmental factors such

as maternal and paternal age, as well as prenatal exposure to chemicals or pollution as possible causes of autism.

One study in particular states, “...having a child with autism increased by 18 percent for every five-year increase in the mother’s age. A 40-year-old woman’s risk of having a child with autism was 50 percent greater than that of a woman 25 to 29 years old.”

While autism is not caused by **one** specific factor, maternal age and other environmental factors can increase the risk of having a child born with autism.

The impact of misinformation in the media is amplified when false claims are introduced or supported by people with authority and credibility. Two figures in particular, President Donald Trump and RFK jr., have spread and created the most misinformation. Actress Jenny McCarthy also perpetuates the vaccine theory belief. . As mentioned before I came on the stage, one statement in particular continues to impact many people's lives, “ autism is a tremendous horror show.”

This statement was made by president Donald Trump. Similarly, Actress Jenny McCarthy writes of her child **losing his soul** after contracting

autism from the MMR vaccine. Lastly the claim has been made that autism is a growing epidemic. Some call it an epidemic of autism, but is it an epidemic of a condition, or an epidemic of finally noticing people who have always been among us?

Another example of misinformation spread through people in positions of power, is the tylenol etiology, popularized by President Trump and RFK jr.

In recent months, versions of the Tylenol “cause” have been presented.

Most are described as follows: since the mother took Tylenol during pregnancy, her child has autism, or, if Tylenol was given to the baby after birth, the child would develop autism. Helen Tager-Flusberg, a researcher at Boston University states, “...of all the pain/fever medications, Tylenol is clearly the safest for pregnant women to take.”.

Expert scientists who specialize in this information stand by evidence based claims, but Trump and RFK are contradicting these claims and irresponsibly spreading misinformation.

Because of these claims, “... more than \$40 million in grants awarded by the National Institutes of Health for dozens of autism-related research projects were cancelled under Kennedy’s watch.”

Thomas Henry Huxley stated , "The great tragedy of Science—the slaying of a beautiful hypothesis by an ugly fact", though I look at it this way.

The great accomplishment of Science is the slaying of an ugly hypothesis by a beautiful fact. Tylenol doesn’t cause autism. Vaccines don’t cause autism. Mothers don’t cause autism. These ugly hypotheses have been slayed by scientific research.

The misinformation mentioned previously can show many factors that have been researched as the cause of autism, but what people disregard is the fact that “...studies claim that 60 to 90% of the risk of autism comes from your genome.”

Science and research have made the point of autism being a neurological disorder that is mainly genetic, and have finalized it, but stigma can't be solved by science, but rather by people and their actions.

The woman in the grocery store, President Trump, and RFK, among others, all represent a lack of real understanding regarding autism. If people in power promoted messages of inclusivity and value for all humans regardless of their disability or disorder, then that would be a good start.

By following science and evidence based claims, as well as truthful research, you can truly understand autism more, and the real causes of it.

When knowledge is spread, it creates awareness about autism that further educates others. Inclusive messages, scientific research, and education can go a long way to help people like my brother.

As Maya Angelou once said, “If you know better, you do better”.

Now that you know better, my brother needs you, our community needs you, and the world needs you, to do better.

Thank you.