The rise of autism

“ In February 2007 the Centers for Disease Control and Prevention revised the prevalence figures for ASD to one in every 150 individuals” (Richard, 2008, p. 26). There are many theories for this increased incidence. One factor discussed is the ability to finally fully diagnose the disorder. Since the increased awareness of autism, scientists have been busy researching and modifying thediagnosticcriteria for autism. Correctly diagnosing is a very important step in helping children improve skills that are affected by autism.

The other factors discussed are the general developmental disorders that take place during earlychildhood. There are many possible factors, such as vaccinations and genetics, that have led to the rise of autism and because of this rise funding for autism research has increased tremendously, as has the cost of treatments. Autism used to be a low incidence disorder now it is one of the fastest growing developmental disabilities in the United States. There is still not one explanation for this sudden change in history, but scientists are getting closer and closer to the answer everyday.

Since scientists have discovered a diagnosis for autism, they have been able to better understand autism and the possible causes for its existence. Proper diagnosis has been a huge factor in the rise of autism, but that still doesn’t mean the cause of autism is not important. There is a reason for this rise and finding the cause is the only way scientists are going to be able to prevent this increased incidence from growing in the future. One possible factor that scientists are researching is environmental toxins. Evironmental toxins have been a long suspect for the cause of autism.

There are many ways that children can be exposed to these toxins. Children could be exposed even before birth, during excessive ultrasounds and even electronic devices. One scientist conducted a study on the drug terbutaline, a drug used to stop pre-term labor in pregnant woman. He found a direct correlation in the continued use of terbutaline and the increased likelihood of autism among twins (Patel & Curtis, 2008, p. 83). This is just one study that has been proven to show a link between environmental toxins and autism. Mercury is another issue that has been researched.

Mercury has been put in the air through coal-fired power plants, as well in vaccines. Mercury and other chemicals have been shown to alter the normal development of the brain during fetal development in the womb and during early childhood development (Kirby, 2005). Findings have indicated that many children have a metabolic impairment that reduces their ability to rid their bodies of heavy metals and other toxins (Wallis, 2008). This suggests that there is some link between the two, environmental toxins and autism, even if toxins are not the sole cause of the disorder.

Another possible factor is nutritional problems among autistic children. Autistic children have significantly low levels of nutrients in the hair, blood and other tissues. Along with the lack of nutrients, they usually have low levels of magnesium, zinc, selenium, vitamins A, B-complex, D and E, omega-3 fatty acids, and carnitine (Patel & Curtis, 2008, p. 82). Therefore, this proves that nutritional deficiencies is a common problem among autistic children and may link scientists to a possible cause. Another issue scientists have found in autistic children deals with the allergies towards gluten and casein.

Gluten is a protein found in wheat and other grains and casein is a protein found in dairy products. Scientists have found that children who have allergies to gluten and casein experience odd behaviors. If an autistic child would eat either of these two substances it would send them into hours of disturbing behaviors (Simontacchi, 2008, p. 10). Scientists have found because of this study that children that are a gluten-free and casein-free diet, they do not experience as many tantrum behaviors. This also helps support the fact that nutritional problems can cause autism.

The last possible factor discussed is the possibility of genetics and its connection to autism. Most scientists believe that genetics is one of the major causes for autism. There are many findings that have led scientists to believe this is true and one of these is simply because this disorder has been known to run in families. Studies have shown that if one child is autistic, his or her sibling has a three to six percent chance of being autistic as well. Identical twins have a much greater probability of being autistic than fraternal twins (Merriman, 2008, p. 8).

This is more than enough evidence to show that there is a connection between genetics and autism. Scientists have also discovered a variety of genes that have showed signs that link to autism. Scientists are still not positive which gene has more of a connection with autism, but they definitely have found a relation between the two. One of the areas that researchers in the Autism Consortium have identified is the 25-gene area on chromosome 16 that when duplicated or deleted could account for a small percentage of autism cases (Merriman, 2008, p. 18).

Scientists have uncovered a lot of new evidence to support the connection between autism and genetics. The rise in autism has increased funds for autism research tremendously. Since scientists have been able to fully diagnose autism, government involvement has grown immensely. There have been many new foundations introduced to help research for autism. One of the many include The Autism Research Foundation, which is a nonprofit, tax-exempt organization dedicated to researching the neurological underpinnings of autism and other related developmental brain disorders (Chmura, 2008).

The Autism Research Foundation has a big impact on the future for autism research. A recent news release in April 2008 stated that, “ The FY08 Defense Appropriations Act provides $6. 4 million for the Department of Defense Autism Research Program to improve the lives of individuals living with autism spectrum disorder now” (Chmura, 2008). This contribution has been an enormous help in the funding for autism research. The rise of autism has also caused an increase in cost for the families of the autistic children.

Families of the autistic child spend thousands of dollars on treatment. Most of thismoneyfamilies spend is just trying to find the right treatment for their child because not all treatments work for the same for every child. Newtechnologyhas also been a factor in the increased cost for autism treatments. Not only is the cost of the treatments expensive so is the cost of screening and diagnosis. Many groups have started grant programs to assist those families with an autistic child who are in financial crisis. One of these grants is brought by the National Autism Association.

Families who live in the United States with a child, no older than age eighteen, on the autism spectrum may qualify for the grant. The maximum dollar amount one can request is $1, 500. This money is to only be used for biomedical treatments, supplements or therapies for the child (“ CDC study”, 2007, p. 6). These grant programs will be a huge help for families who are struggling to pay for these expensive treatments and screening tests. Scientists are still in the process of finding the exact cause of autism. One day scientists may finally be able to find a cure and put an end to this rise of autism children.

Knowledge of autism has come a long way since the first diagnosis of autism and hopefully that trend continues into the future. Diagnosis has been a very important part in helping autistic children improve their skills as well as helping scientists better understand autism altogether. Now scientists have a lead in the possible factors like environmental toxins, nutrition, and genetics. Once the pieces are put together, scientists will finally be able to control and hopefully put an end to the rise of autism among children in the United States.

Reference

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