Autism Awareness: Research--unlocking the Mystery of Asds

Center for Persons With Disabilities

Follow this and additional works at: https://digitalcommons.usu.edu/cpd_blog

Recommended Citation
https://digitalcommons.usu.edu/cpd_blog/340
Autism is one of a group of disorders known as autism spectrum disorders (ASDs). ASDs are a group of developmental disabilities that can cause significant social, communication, and behavioral challenges. The Centers for Disease Control and Prevention (CDC) estimates that an average of one in 110 children in the U.S. have an ASD.

We do not know all of the causes of ASDs. However, scientists have learned that there may be many different factors that make a child more likely to have an ASD, including environment, biologic and genetic factors.

Most scientists agree that:

- Genes are one of the risk factors that can make a person more likely to develop an ASD;
- Children who have a sibling or parent with an ASD are at a higher risk of also having an ASD;
- The once common belief that poor parenting practices caused ASDs is NOT true;
- There is some evidence that the critical period for developing ASDs occurs before birth.

There is still a lot to learn about ASDs. Research on ASDs has increased significantly in the last 10 years.

In 2000, Congress passed the Children’s Health Act, a legislation that mandated the establishment of a new autism research network. Large studies are currently being done by several organizations including the National Institute of Health's Studies to Advance Autism Research and Treatment (STAART) program, and the CDC's Study to Explore Early Development (SEED).

The BioMedical Immunology/Genetic Laboratory at the CPD has been doing research on the genetic causes of autism for several years. One genetic study under Dr. Anthony Torres' direction, *Early Markers for Autism (EMA)*, is investigating prenatal and newborn biologic markers for autism.

According to Dr. Anthony Torres, director of the BioMedical Lab, "The genetic studies [of ASD] are not anywhere near as simple as people thought they would be." The causes may be related to genes, the environment, or a relationship between the two.

The goal of the EMA study is to identify biologic factors that can be used to predict which children will have an ASD. Researchers are analyzing maternal blood collected during mid-pregnancy of mothers who gave birth to children who developed autism in comparison to mothers who gave birth to children who did not develop autism, and infant blood collected at birth from children with ASD, children with other developmental disabilities, and typically developing children. Investigators are examining a wide range of factors including early biologic markers, genetic factors, immunologic (disease protection) factors, and environmental exposures during critical stages of fetal brain development.

The results of this study will contribute to identifying factors that increase the risk for autism and may lead to the eventual prevention of autism and related disorders.

This study is being conducted as a collaboration between the California Department of Health Services, Kaiser Permanente Division of Research, and laboratory scientists at University of California Davis. It is funded by the National Institutes of Mental Health and the National Alliance for Autism Research.

*Note: This is the 4th in a series of blog posts during April's Autism Awareness Month of how the CPD is supporting and providing research, services, and resources for children with autism.*