Medical Xpress

Autism, intellectual disabilities related to parental age, education and ethnicity, not income

September 19 2011

New research from the University of Utah in collaboration with the Utah Department of Health (UDOH) shows that the presence or absence of intellectual disability (ID) and autism spectrum disorders (ASD) varies with risk factors such as gender, parental age, maternal ethnicity, and maternal level of education. The study, published Sept. 15, 2011, in *Autism Research*, also shows that household income level has no association with either ID or ASD, in contrast to what other studies have suggested.

ASDs are a group of childhood neurodevelopmental disorders characterized by problems with social interaction, communication, and restricted and unusual behaviors. ASDs vary widely in severity and may be accompanied with or without intellectual disability. Amid a significant increase in the reported prevalence of ASDs, the Centers for Disease Control and Prevention (CDC) has recognized autism as an urgent public health concern and stressed the importance of characterizing risk factors.

"ASDs represent a diverse group of conditions that may have different causes, and children with ASDs, either with or without ID, represent opposite ends of the autism spectrum," says Judith Pinborough-Zimmerman, Ph.D., research assistant professor in the Department of Psychiatry at the University of Utah, and first author on the study. "By identifying risk factors associated with ASDs, we may be able to gain a

better understanding of the underlying causes of autism."

Pinborough-Zimmerman and her colleagues identified children with ASD and/or ID in a three-county area surrounding Salt Lake City through the Utah Registry of Autism and Developmental Disabilities (URADD), a multiple-source, population-based surveillance program. They evaluated a variety of demographic factors and found that children with ASD but not ID were significantly more likely to be male and to have mothers of white, non-Hispanic ethnicity. Children with both ASD and ID were also more likely to be male, but were more likely to have mothers older than 34 years of age. Children who had ID but not ASD were significantly more likely to have fathers older than 34 years of age and significantly less likely to have mothers with more than 13 years of education.

"Demographic risk factors, such as male gender and parental age have been well-described," says Pinborough-Zimmerman. "However, the way in which socioeconomic factors are associated with the development of ASDs is poorly understood."

To investigate the link between socioeconomic factors and autism, Pinborough-Zimmerman and her colleagues examined how various measures of income changed over an eight-year period in families with a child with ASD and/or ID, as compared with the general population. The researchers were surprised to find no clear association between markers of income and the risk for ASD and/or ID, as previous studies have shown ASD to be associated with indicators of higher income and ID to be associated with indicators of low income.

"This study, despite the small sample size, is an example of the importance of exploring the many variables, that in combination, may result in an increase risk of developing ASD," says Dr Harper Randall, Medical Director for the Division of Family Health and Preparedness,

UDOH.

According to Pinborough-Zimmerman, the strength of this study lies in its broad ascertainment methods, which utilized multiple educational and health source records to include a wide spectrum of ASD cases. This study was also unique in analyzing socio demographic risk factors for ASD and ID, both independently and together.

"We hope that by identifying the many possible genetic, environmental, and socioeconomic factors that may contribute to this complex group of neurodevelopment disorders, there can be improvements in diagnosis, treatment, and prevention," says Pinborough-Zimmerman.

Provided by University of Utah

Citation: Autism, intellectual disabilities related to parental age, education and ethnicity, not income (2011, September 19) retrieved 1 May 2024 from https://medicalxpress.com/news/2011-09-autism-intellectual-disabilities-parental-age.html