Higher Maternal Age Predicts Risk of Autism

Reports new study in Journal of the American Academy of Child and Adolescent Psychiatry

Washington D.C., April 26, 2012 – In a study published in the May 2012 issue of the Journal of the American Academy of Child and Adolescent Psychiatry, led by Mr. Sven Sandin, of the Karolinska Institutet, Sweden and King’s College London, researchers analyzed past studies to investigate possible associations between maternal age and autism. While much research has been done to identify potential genetic causes of autism, this analysis suggests that non-heritable and environmental factors may also play a role in children’s risk for autism.

The researchers compared the risk of autism in different groups of maternal age (under 20, 24-29, 30-34, and 35+). They found that children of mothers older than 35 years had 30% increased risk for autism. Children of mothers under 20 had the lowest risk of developing autism. The association between advancing maternal age and risk for autism was stronger for male offspring and children diagnosed in more recent years.

The analysis included 25,687 cases of autism spectrum disorder and over 8.6 million control subjects, drawn from the 16 epidemiological papers that fit inclusion criteria for the study as defined by the investigators. The researchers identified and discussed several potential underlying causes of the association between maternal age and risk for autism such as increased occurrence of gene alteration during the aging process and the effects of exposure to environmental toxins over time.

Sandin said of the study, “The study makes us confident there is an increased risk for autism associated with older maternal age, even though we do not know what the mechanism is. It has been observed in high quality studies from different countries, including the US. All studies controlled for paternal age which is an independent risk factor for autism. This finding adds to the understanding that older age of the parents could have consequences to the health of their children.”


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Notes for editors

Full text of the article is available to credentialed journalists upon request; contact Mary Billingsley at +1 202 966 7300 x105 or mbillingsley@jaacap.org. Journalists wishing to interview the authors may contact Sven Sandin at +46 76 930 9018 or sven.sandin@kcl.ac.uk.

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Published twelve times per year, each issue is committed to its mission of advancing the science of pediatric mental health and promoting the care of youth and their families.

The journal's purpose is to advance research, clinical practice, and theory in child and adolescent psychiatry. It is interested in manuscripts from diverse viewpoints, including genetic, epidemiological, neurobiological, cognitive, behavioral, psychodynamic, social, cultural, and economic. Studies of diagnostic reliability and validity, psychotherapeutic and psychopharmacological treatment efficacy, and mental health services effectiveness are encouraged. The journal also seeks to promote the well-being of children and families by publishing scholarly papers on such subjects as health policy, legislation, advocacy, culture and society, and service provision as they pertain to the mental health of children and families.

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