

# The Risk of Autism in Children Relevance of Age of Father & Genetics During Pregnancy Clinical Observation

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## Abstract

Autism spectrum disorders (ASDs) are neurodevelopmental disorders characterized by difficulties in social interaction and communication alongside stereotypic, repetitive behavior and narrow interests. The reported prevalence of ASD in children has increased during the last two decades. The current prevalence of ASD is estimated to be approximately 1% (1–3). At least part of the explanation for the increasing ASD prevalence is likely to be related to factors such as changing diagnostic criteria, greater awareness, improved case identification, and changes in age of diagnosis

**Key words:** Autism spectrum disorders

## Introduction

Autism spectrum disorders (ASDs) are neurodevelopmental disorders characterized by difficulties in social interaction and communication alongside stereotypic, repetitive behavior and narrow interests. The reported prevalence of ASD in children has increased during the last two decades. The current prevalence of ASD is estimated to be approximately 1% (1–3). At least part of the explanation for the increasing ASD prevalence is likely to be related to factors such as changing diagnostic criteria, greater awareness, improved case identification, and changes in age of diagnosis [4]. In the same time period, however, parental age has also increased in many countries, and in a number of studies researchers suggest that older parental age is associated with an increased risk of ASD [5–14].

Although ASDs are strongly genetic, twin studies indicate there must also be environmental factors [15–17]. As mentioned previously, the authors of several studies from different cultures have reported greater parental age as a risk factor for ASD. However, the results from these studies are quite inconsistent; after adjusting for other potential confounders, some reported the role of advanced paternal age only [7, 9], another group reported the role of advanced maternal age only [6], and some others point to advanced age of both parents [10–13]. In addition, in one study researchers found no effect of either maternal age or paternal age [8], and in one study including only maternal age, authors found no statistical significant effect of maternal age [5]. It is unclear whether this association reflects biological causation or whether this association is attributable to confounding. Part of the inconsistency may be caused by the fact that

many studies covered a wide time span but few adjusted for the increasing prevalence of ASD and the authors of only one study assessed the potential modification effect between maternal and paternal age [14].

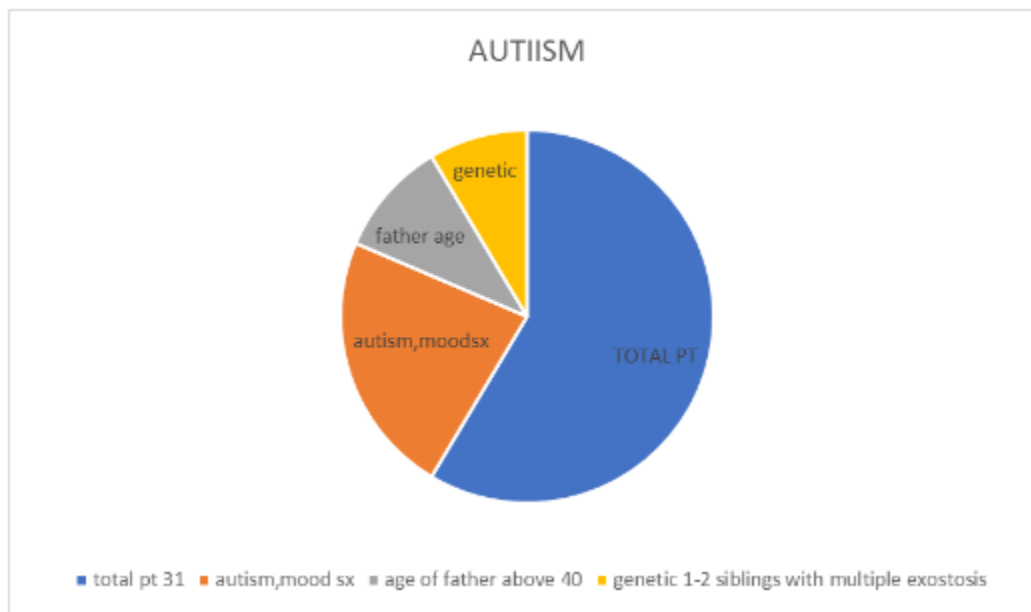
To our knowledge, no previous study has attempted to replicate the finding in a sibling design, where the association between parental age and ASD is estimated within siblings in the family. The sibling design appears to be one of the most efficient epidemiological designs to substantially reduce the potential confounding caused by environment and genetic factors within the family [18]. Couples with a genetic disposition to ASD may simply have their children later. Similarly, giving birth at a later age may could be an indicator of shared social environmental factors that include the possibility of greater awareness of ASD and a subsequent greater likelihood of ASD diagnosis.

## Objective

The risk of autism in children relevance Age of father & genetics during pregnancy was associated with a significantly increased risk of autism spectrum disorder and childhood autism in the offspring

## Methods

We conducted a population-based our observational on the risk of autism in children relevance of Age of father & genetics during pregnancy. The risk estimates were adjusted for known risk factors for autism.



## Discussion

In this population-based on my observation in outpatient clinic the study of children of father age above 40 who has siblings with psychiatric disorder had a higher risk of autism spectrum disorder compare to the age group

## Conclusions

Relevance of Age of father & genetics during pregnancy was associated with a significantly increased risk of autism in the offspring, these findings must consider limited to advancing paternal or maternal age Gestational age and birth weight very important avoid developmental delay Avoid endogamy marriage Encourage Exogamy marriage

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