

What factors affect age of diagnosis for autism?

A study recently published in the Journal of Epidemiology and Community Health looked at the individual and community-level factors that are linked to age of diagnosis of autism.¹

Why was the study done?

During the 1990s, autism diagnoses greatly increased; at the same time, the age when children were diagnosed dropped. However, the age of diagnosis has not dropped equally for all children. Factors that may affect age of diagnosis include sex, race, access to health care, and severity of symptoms; this study looks at a number of these factors to see if they have changed over time. It is important to understand these factors because early diagnosis and treatment are key to better outcomes in autism.

How was the study done?

A large population of children (over 17,000) born in California between 1992 and 2001 was analyzed. The following types of information were used:

Individual-level

- Sex
- Race
- Parent characteristics
- Poverty level
- Birth order
- Symptoms

Community-level

- Education
- Wealth (property values, households in poverty)
- Autism prevalence (how common in the community)

¹ Fountain, C., King, M.D., and Bearman, P.S. 2011. Age of diagnosis for autism: individual and community factors across 10 birth cohorts. *Journal of Epidemiology and Community Health*. 65: 503-510.

What were the results?

Individual-level factors:

- In general, non-white and Hispanic individuals are diagnosed later
- Children with more educated parents are diagnosed earlier
- Children with better communication skills were diagnosed much later than those with lower skills

Community-level factors:

- Areas with higher autism prevalence tended to diagnose autism slightly earlier
- Diagnoses occur earlier in wealthier communities
- The effect of community factors decreased over time

Socioeconomic status (SES):

Children from low SES families (Hispanic, young and poorly educated immigrant parents, living in poor, low-education areas) were compared to children from high SES families (white, older and well-educated parents, in wealthy and educated neighbourhoods).

- In the earlier years of the study period, high SES children were diagnosed about 16 months earlier than low SES children
- By the year 2000, this gap had reduced to 6 months

Why is this study important?

This study shows us that there are some individual-level factors that are important in determining age of autism diagnosis, especially parental education. There is still a gap in age of diagnosis between high- and low-socioeconomic status children, although it has decreased over time. It is important for doctors, government and health services to ensure that all parents – whatever their background or education - have the information and tools they need to identify autism in children at an early age.