

NEWS

# Clinical research: Schizophrenia in family ups risk of autism

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Family history: Nationalized medical records tracking psychiatric diagnoses in Sweden allow researchers to parse out risk factors for autism.

A family history of schizophrenia or bipolar disorder increases the risk of autism, according to an epidemiological study published 2 July in the *Archives of General Psychiatry*<sup>1</sup>. The results suggest that these disorders share underlying mechanisms.

Schizophrenia, bipolar disorder and autism are diagnosed as separate disorders and have some non-overlapping symptoms and characteristics. However, they have **some of the same risk factors**.

For example, duplications and deletions of the **16p11.2** genomic region have been associated with **both autism and schizophrenia**, and studies have found mutations in the well-described schizophrenia risk gene **DISC1** in **people with autism**.

In the new study, researchers looked at 25,432 individuals with autism from the **Swedish National Patient Register**, which lists psychiatric diagnoses in Sweden between 1973 and 2001. They also looked at 4,982 individuals with autism registered in the health records of Stockholm County, Sweden, between 1984 and 2007. A third group includes 386 Israeli individuals with autism born in 1980, whose medical assessments were taken before they entered compulsory military service.

The researchers also included ten controls for each individual with autism, matched by their gender and year of birth as well as that of their relatives. Both Swedish databases carry information about the parents of individuals with autism. The Swedish national database and the Israeli group include data on siblings of people with autism.

In the Swedish groups, having a parent with schizophrenia increases the risk of autism about three-fold. Having a sibling with schizophrenia increases the risk of autism 2.6-fold in the Swedish national group and about 12-fold in the Israeli group. The elevated risk in the Israeli group could be the result of the small sample size, which increases statistical errors, the researchers say.

The association between autism and bipolar disorder is similar but less significant, the study found. Having a parent with bipolar disorder increases the risk of autism about two-fold in the large Swedish database and 1.6-fold in the Stockholm group. Having a sibling with bipolar disorder increases the risk of autism 2.5-fold, based on data from the larger Swedish group.

### References:

**1: Sullivan P.F.** *et al. Arch. Gen. Psychiatry* Epub ahead of print (2012) [PubMed](#)