

Parental psychopathology and offspring attention-deficit/hyperactivity disorder in a nationwide sample.

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Abstract

OBJECTIVE:

To study the associations between a wide range of parental psychiatric disorders and offspring attention-deficit/hyperactivity disorder (ADHD).

METHOD:

This study is based on a nested case-control design. The association between parental registered psychiatric diagnoses and offspring ADHD was examined adjusting for socioeconomic and prenatal factors. Data were linked from Finnish nationwide registers. The cases ($n = 10,409$) were all the children born between years 1991 and 2005 in Finland and diagnosed with ADHD by the end of 2011. Four controls without ADHD ($n = 39,124$) were matched for every case by sex, age, and place of birth. Main outcomes were adjusted odds ratio (aOR) for parental diagnosis of cases vs controls. Analyses were further stratified by sex. Disorders diagnosed before and after birth was analyzed separately.

RESULTS:

The odds ratio for ADHD increased when only mother (aOR 2.2, 95% CI 2.0-2.3), only father (aOR 1.7, 95% CI 1.6-1.8) and both parents (aOR 3.6, 95% CI 3.3-4.0) were diagnosed. Maternal diagnosis showed stronger association than paternal. The weight of association between several parental disorders and offspring ADHD were similar. Maternal psychopathology overall showed stronger associations with girls than boys with ADHD. The diagnoses registered after birth did not show stronger association than the diagnoses registered before.

CONCLUSIONS:

Maternal psychopathology showing stronger association than paternal implies that environmental factors or their interaction with genetic factors partly mediates the risk of parental psychopathology. Similar associations between several maternal psychiatric disorders and offspring ADHD points towards the need for investigating some common mother-related risk factors.