Association between immigrant background and ADHD: a nationwide population-based case–control study.

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Background
Information about psychiatric disorders among those with immigrant parents is important for early detection and service development. The aim of this study is to examine the association between parental immigration and the diagnosis of attention-deficit hyperactivity disorder (ADHD) in offspring in Finland.

Methods
This matched case–control study was based on a national birth cohort. The sample included all singletons who were born in Finland in 1991–2005 and diagnosed with ADHD by the year 2011 (n = 10,409) and their matched controls (n = 39,124). Nationwide registers were used to identify participants and to gather information on the parents' country of birth and native language. Conditional logistic regression analyses were conducted using maternal and paternal migration status and region of birth as well as time since maternal migration as exposure factors.

Results
The likelihood of being diagnosed with ADHD was significantly increased among children of two immigrant parents [adjusted odds ratio (aOR) 4.7, 95% CI 3.4–6.6] and children of an immigrant father (aOR 1.9, 95% CI 1.6–2.2). The likelihood of receiving an ADHD diagnosis was equal among children whose mother was a recent immigrant when she gave birth and those whose mother had stayed in Finland at least for a year before birth. The association between parental migration and ADHD diagnosis was strongest among fathers born in sub-Saharan Africa or Latin America and among mothers born in sub-Saharan Africa or North Africa and Middle East. Children, whose parents were born in countries with low Human Development Index (HDI), were more often diagnosed with ADHD.

Conclusions
The increased likelihood of ADHD diagnosis among children of immigrants indicates increased exposure to environmental risk factors, differences in the use of health services, or challenges in diagnosing immigrants' children.