Research Review: The role of obstetric and neonatal complications in childhood attention deficit and hyperactivity disorder – a systematic review

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Abstract

Background
Attention deficit and hyperactivity disorder (ADHD) is a developmental disorder characterized by an inability to sustain attention, activity levels and impulse control, and, according to the latest studies, the prevalence is about 8% and in some countries less than 1%. Currently, it is well-known that complications during the perinatal period have significant implications on child's physical and mental health. The purpose of the present paper is to review the literature about the association between perinatal complications and future risk of an ADHD diagnosis.

Methods
A research in the main database sources has been conducted to obtain a systematic review on the perinatal risk factors of ADHD.

Results
Among perinatal complications, available data indicate low birth weight (LBW) (Cohen's d effect size range: 0.31–1.64-small effect size) and preterm birth (PB) (range d: 0.41–0.68) as the most important factors associated with a future diagnosis of ADHD.

Conclusions
PB and LBW children should be carefully monitored for an early diagnosis of ADHD limiting the impact of the disease in life span. A systematic review focusing on these risk factors have not been published until now, in the next future preventive strategies should be developed in order to minimize ADHD onset.