

## The egg or the hen: Is ADHD the result of attachment problems – or do attachment problems arise from ADHD?

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*An 11-year-old boy is referred to assessment in a child psychiatric department due to severe symptoms of ADHD.*

It is well recognized that Attention-Deficit/Hyperactivity Disorder (ADHD) is one of the most prevalent child psychiatric disorders. What's more is that an increasing amount of evidence points to ADHD as a condition persisting into adulthood (1,2). ADHD is further associated with significant comorbidity and impaired prognosis (3-5). Some studies suggest the subgroup developing comorbidity also displays deviant developmental trajectory and poor prognosis (6,7). Importantly, this subgroup may represent more than 50 percent of diagnosed children (5). Further, longitudinal studies have shown age-dependent decline in core symptoms (hyperactivity, impulsivity and attention problems) whereas the rate of functional ADHD remission is no more than 10 % (8). Is it possible that the core symptoms of ADHD are not the main problem in children and adolescents with ADHD?

*During the child psychiatric assessment of the 11-year-old boy, it became clear that he had experienced considerable adversity in his life. His mother had been engaging in relations with men who behaved violently toward the boy and the mother. The boy's biological father was characterized as "only functional when he is under the influence of amphetamine" and the contact between the boy and his father had been no more than occasional since the boy was three years old. Does the boy have ADHD or are his symptoms more likely to be a result of insecure attachment?*

One certainly has to consider that this less than optimal childhood environment may be explained by untreated ADHD-symptoms in the parents. A study found that as much as 50 % of parents of children with ADHD suffered from ADHD themselves (9). As ADHD is associated with impaired prognosis, we further need to consider which factors may be important in improving our current treatment strategies and long-term prognosis. It is of outmost relevance to investigate whether our current treatment strategies are efficient. Pharmacological

treatment (the most common treatment strategy for ADHD) is primarily targeting the core symptoms of ADHD, but does it make a significant difference in long-term prognosis? Researchers have attempted to determine this by conducting comprehensive Cochrane reviews. These reviews have concluded that both in terms of pharmacological treatment and other general treatment strategies (parental training and social training for children), the evidence is not sufficiently strong to form the basis of clinical guidelines (10-12). Regarding other potentially important characteristics of ADHD, it has been found that the majority of children (> 80 %) with ADHD can be classified as insecurely attached with respect to their primary caregiver (13). ADHD and insecure attachment representation display shared features such as high levels of emotional dysregulation in the early years, and problems in peer relations in adolescence (14-17). The question is; what comes first: ADHD or insecure attachment? Some studies suggest that inborn vulnerabilities in the child may influence the process of attachment formation (18, 19). On the other hand, insecure attachment has been linked to increased risk of developing ADHD symptoms (20-22). Hence, is the persistent low level of functioning in many ADHD patients an indication of clinicians putting too much emphasis on reducing core symptoms - while other factors associated with ADHD may be determinants of the long-term prognosis?

Perhaps in most cases ADHD cannot or should not be classified as purely caused by neurobiological vulnerabilities or environmental factors. Rather, ADHD may need to be considered in the context of familial risk and resilience. In this, we need to take into account the multiple etiologies including the impact of genetics as well as environmental factors - both acting across generations. Perhaps we should put more focus into perceiving ADHD as a chronic condition requiring thorough and continuous assessment to address the specific causes of the

symptomatology in each family. This may facilitate a more individualized treatment strategy.

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