

The medical costs of ADHD



Executive summary

Attention Deficit / Hyperactivity Disorder (ADHD) starts in childhood, but persists into adulthood in approximately half of the cases. Not only is this condition impairing for the individual, it is also costly. To gain more insights in these costs, researchers calculated the medical costs of ADHD from anonymised German insurance data of 3.7 million people. The total surplus medical costs of a person with ADHD were 1508 euro. Most costs are made in inpatient and outpatient care, with medication costs in third place. ADHD in adults is underdiagnosed in the insurance data compared to world-wide estimates, and hence potentially undertreated. Preventing the development of comorbidities with age should be the focus of mental healthcare, i.e. through continued treatment of adolescents into adulthood.

ADHD diagnosis

- Symptoms of inattention, hyperactivity and/or impulsivity
- Onset before age 12
- Impairing in multiple settings (i.e. at school and at home)

German insurance data¹



3.3% children with ADHD
76% boys

0.2% adults with ADHD
66% men

25,300 individuals in the data had an ADHD diagnosis. A reference group was randomly selected from the data of individuals without ADHD, matched on age and gender with the ADHD group.

World-wide prevalence of ADHD^{2,3}



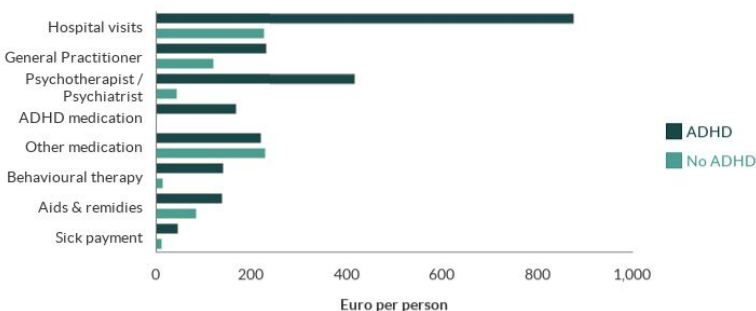
5% children with ADHD
~70% boys

2.5% adults with ADHD
~50% men

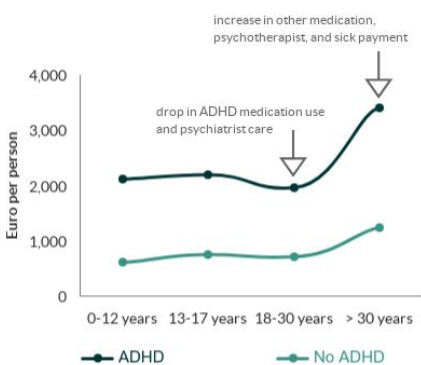
Note: As the prevalence of ADHD in the insurance data is lower than world-wide estimates of ADHD, the data likely represent only the more severe cases of ADHD.

Medical costs per person

All age groups

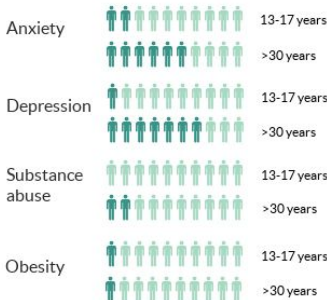


Total medical costs increase in adulthood



The risk of developing a comorbid disorder with ADHD is higher for adults

e.g. 22% of ADHD children and 59% of ADHD adults also have an anxiety disorder



Improve adult mental health care

- ADHD is a lifelong, impairing condition that brings along substantial medical costs
- ADHD in adults is underdiagnosed. Healthcare professionals need to be trained to recognise ADHD symptoms in adulthood.
- Improving the transition from child to adult mental healthcare may reduce occurrence of comorbid disorders, and reduce costs

Sources: (1) Libutzki, Ludwig, May, Højbjerg Jacobsen, Reif and Hartman (2019). Direct medical costs of ADHD and its comorbid conditions on basis of claims data analysis. (2) Polanczyk, de Lima, Horta, Biederman and Rohde (2017). The worldwide prevalence of ADHD: a systematic review and meta-regression analysis. *Am J Psychiatry*, 164(6):942-8. (3) Simon, Czobor, Balint, Meszaros and Bitter (2009). Prevalence and correlates of adult attention-deficit hyperactivity disorder: meta-analysis. *Br. J. Psychiatry* 194, 204-211.

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