

Methylphenidate Prescriptions for Children and Adolescents with Attention-Deficit/Hyperactivity Disorder (ADHD): New Data from Nordbaden/Germany

Michael Schlander^{1,2}, Oliver Schwarz^{1,3}, Michael Viapiano⁴, Norbert Bonauer⁴

¹Institute for Innovation & Valuation in Health Care (InnoVal^{HC}), Eschborn, Germany; ²University of Applied Economic Sciences Ludwigshafen, Germany; ³University of Cooperative Education, Mannheim, Germany; ⁴Kassenaerztliche Vereinigung Baden-Wuerttemberg, Karlsruhe, Germany

In line with international trends, methylphenidate prescriptions in Germany have been growing 20-fold over the last decade. This development has contributed to concern about potentially inappropriate and excessive psychostimulant treatment for youths.

Objective: To clarify methylphenidate prescriptions for children and adolescents with ADHD, using the comprehensive medical claims database of Nordbaden/Germany, covering an insured population of 2.234m (hereof, 468,000 children and adolescents) in 2003.

Methods: 11,245 children and adolescents with a diagnosis of ADHD (ICD-10-codes for "Hyperkinetic Disorder", F90.0, F90.1) were identified. For a retrospective analysis of methylphenidate prescriptions by age, gender, and comorbid conduct disorder, administrative data from the organization of licensed physicians (Kassenaerztliche Vereinigung) in Nordbaden/Germany were combined with data from the regional vdak, an association of statutory sick funds.

Results: For the regional population, methylphenidate treatment prevalence rates were approximately 1.7% (children) and 0.6% (adolescents). Among those with a diagnosis of ADHD, 4.3% of preschoolers (age 0-6) were administered methylphenidate. Among children (age 7-12), 35.1% (95%-CI, 33.0%-37.1%) were prescribed methylphenidate; in adolescents (age 13-19), this rate increased to 46.2% (42.7%-49.8%). Across ADHD groups analyzed, children with concomitant conduct disorder (42.4%; 39.4%-45.5% versus 27.9%; 26.2%-29.7%) and boys (34.4%; 32.6%-36.2% versus girls, 25.5%; 22.7%-28.4%) were more likely to be treated with methylphenidate. Very few patients (<1%) received higher doses than recommended. Child and adolescent psychiatrists accounted for 35% of methylphenidate prescriptions for patients with ADHD (pediatricians, 40%; general practitioners, 12%). During 2003, the number of defined daily doses prescribed in Nordbaden increased by a compound annual growth rate of 27%.

Conclusions: Though methylphenidate prescriptions continued to increase during 2003, the present data do not provide evidence for overuse. Of note, however, a limitation of administrative database analyses is lack of information on the accuracy of diagnoses. - The low rate of methylphenidate prescriptions for preschoolers corresponds to clinical guidelines.

Presented at Annual European ISPOR Meeting, Copenhagen, Denmark, October 28-31, 2006.

Published in Value in Health, Vol. 9, Number 6 (2006), p. A191-192.