Off-Label Utilization of Methylphenidate for Adults with Attention-Deficit/Hyperactivity Disorder (ADHD) in Germany: Insights from the Nordbaden Project

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 routine clinical care, ADHD is rarely diagnosed in the adult population in Germany. Little is known about actual care for adult outpatients. To date, no pharmaceutical product has been licensed in Germany for use in adult ADHD.

Objective: To assess the (off-label) use of methylphenidate in this group of patients, using the comprehensive medical claims database of Nordbaden/Germany, covering an insured population of 2.234m (or 2.7% of the German population), and hereof 1.766m adults, in 2003.

Methods: 630 adults with a diagnosis of ADHD (ICD-10-codes F90.0, F90.1, "Hyperkinetic Disorder") were identified (administrative prevalence: 0.04%). For a retrospective analysis of methylphenidate prescriptions by gender and coexisting conduct disorder, 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: One third (34.6%) of adult patients with ADHD were treated (off-label) with methylphenidate. Treatment prevalence was somewhat higher for males (39.4%, 95%-CI 31.3%-48.0%; cf. females, 29.0%, 21.2%-37.9%). Patients with pure Hyperkinetic Disorder (F90.0) appeared to be more likely (36.8%, 30.7%-43.3%) than patients with concomitant conduct disorder (F90.1: 14.8%, 4.2%-33.7%) to receive medication (methylphenidate). Most methylphenidate prescriptions for adult patients were written by psychiatrists and other mental health care specialists (50% of DDDs) and by general practitioners (31%). Adult patients accounted for 9% of the total number of methylphenidate prescriptions for patients with ADHD in Nordbaden.

Conclusions: Besides the low administrative prevalence of adult ADHD in Nordbaden, the relatively higher medication rate of patients without concomitant conduct disorder constitutes a peculiar difference compared to prescribing patterns observed for children and adolescents. Though currently the budgetary impact of adult ADHD seems moderate, this is likely to change when physicians begin to recognize adult ADHD more frequently, and once drugs for treatment of the condition will have been licensed.

Presented at Annual European ISPOR Meeting, Copenhagen, Denmark, October 28-31, 2006. Published in Value in Health, Vol. 9, Number 6 (2006), p. A311.