UNITED KINGDOM COST-CONSEQUENCE ANALYSIS OF ARIPIPIRAZOLE IN SCHIZOPHRENIA: DIABETES AND CORONARY HEART DISEASE RISK PROJECTIONS (STAR STUDY)
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OBJECTIVE: Schizophrenia is associated with increased morbidity and mortality compared to the general population, largely resulting from increased incidence of cardiovascular disease and diabetes. Some atypical antipsychotics are associated with adverse metabolic symptoms, such as weight gain, dyslipidaemia and glucose dysregulation, which may further increase the risk of coronary heart disease (CHD) and diabetes. This study aimed to assess the impact of these symptoms on cost of treating patients’ physical health.

METHODS: Data from the Schizophrenia Trial for Aripiprazole (STAR) study showed that metabolic side effects of aripiprazole treatment are less than those experienced by patients receiving standard-of-care (SOC) treatment (physicians’ selection of olanzapine/quetiapine/risperidone). In a post-hoc analysis, projected risks for diabetes/coronary heart disease (CHD) were calculated using the Stern and Framingham models. These risks were used to estimate the difference in direct and indirect cost consequences of diabetes and CHD in schizophrenia patients treated with aripiprazole or SOC over a 10-year period, assuming risk of diabetes onset/CHD events remained linear.

Diabetes costs were estimated from UKPDS and UK T2ARDIS studies, respectively, and CHD costs were estimated using prevalence data from the Health Survey of England and published literature. All costs were inflated to 2007 costs using the UK government’s Pay and Prices Index inflation rates.

RESULTS: The number of avoided diabetes cases (23.4 cases/1000 treated patients) in patients treated with aripiprazole compared with SOC was associated with estimated total (direct and indirect) cost savings of £37,261,293 over ten years for the UK population. Similarly, the number of avoided CHD events (3.9 events/1000 treated patients) was associated with estimated total cost savings of £7,506,770 over ten years.

CONCLUSION: Compared with SOC, the favourable metabolic profile of aripiprazole treatment may provide reductions in health and economic burden to schizophrenia patients and psychiatric health care services in the UK.

THE PREVALENCE AND COSTS OF METABOLIC CONDITIONS AMONG PATIENTS WITH BIPOLAR DISORDERS AS COMPARED TO MATCHED CONTROLS
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OBJECTIVE: Patients with bipolar disorder are vulnerable to developing metabolic illnesses such as hypertension, dyslipidemia, and type 2 diabetes mellitus. In addition, mood stabilizers, anticonvulsants, and antipsychotic medications, which are commonly used to treat bipolar disorder, have been linked to risk for adverse metabolic changes. This study uses a large insurance claims database to examine the prevalence and costs of metabolic conditions among patients with a bipolar diagnosis relative to a matched non-bipolar sample.

METHODS: A retrospective analysis was conducted of medical service and prescription claims from the Thomson Health care MarketScan® Commercial Database (includes claims information on more than 12 million employees with employer-based insurance and their dependents in the United States). Claims data for 28,531 patients with bipolar disorder were compared over one year with data for 85,593 age and gender 1–3: matched control patients with no mental health disorders and no psychotropic medication use. The prevalence and health care costs of metabolic conditions in bipolar patients were compared with those of their matched controls.

RESULTS: The bipolar cohort had significantly higher overall medical service and prescription drug costs than the control cohort ($12,764 versus $3,140, p < 0.0001). Bipolar patients had a significantly higher prevalence of metabolic co-morbidities than the general population (37% versus 30%, p < 0.0001), and medical service treatment costs for metabolic conditions were twice that of the control cohort ($531 versus $233, p < 0.0001). Prescription medication costs for metabolic conditions were higher as well, with bipolar cohort per-patient review of the literature was conducted using a PICO (Population, Intervention, Comparison, Outcomes) form to guide the search strategy. MEDLINE, EMBASE, and Cochrane Library databases, and selected websites, were examined. The search was limited to papers published in English between 1987 and 2007. Studies examining outcomes from mixed patient populations, combination therapies or non-pharmacological interventions were excluded.

RESULTS: The initial search yielded a total of 1999 articles, of which approximately 100 met predetermined inclusion criteria. The studies revealed 12-month prevalence rates ranging from 1.6–3.0%, GAD prevalence was higher among females compared with males and generally decreased with age. Comorbid mental disorders were common among patients with GAD, particularly depressive disorders, and were highly predictive of GAD onset and persistence. GAD was also associated with a substantive reduction in health-related quality of life. SF-36 scores in one study were 12–28 points lower among patients with GAD compared with the general US population (1). The health care resource utilization costs associated with GAD were considerable, although varying patterns of disease identification and treatment made the extent of this utilization difficult to quantify.

Patients with GAD showed significantly higher medical care charges ($2375 vs. $1448, P = 0.006) than patients without GAD (2). CONCLUSION: GAD, along with other anxiety disorders, exerts substantial cost-related burdens on society, driven in part by under-recognition and under-treatment of the disorder. Increased awareness, evidence-based treatment selection and appropriate early intervention could help to alleviate this burden.