UNINTENDED CONSEQUENCES OF CURRENT ANTIDEPRESSANT USE IN A GERIATRIC POPULATION: DRUG-DRUG INTERACTIONS AND THEIR IMPLICATIONS FOR ADHERENCE


OBJECTIVES: Antidepressants can cause undesirable drug-drug interactions when taken simultaneously with certain medications. Elderly patients may be particularly vulnerable to antidepressant interactions due to slower metabolism and utilization of multiple pharmacotherapies. The objective of this study was to determine rates of potential drug-drug interactions involving antidepressants in a geriatric population and their impact on prescription adherence. METHODS: Data were from the MarketScan® Medicare Database, a claims database from retirees with employer-sponsored Medicare supplemental insurance. Subjects were age ≥65 years, new antidepressant users, and had a depression diagnosis between 7/1/2001-12/31/2006. Potential drug-drug interactions involving at least one antidepressant and another drug with overlapping days supplied were identified over the year following antidepressant initiation using the MicroMedex DRUG-REAX® software. Multinomial logistic regression and bivariate statistics were used to evaluate the association between potential interactions and whether patients discontinued, refilled or switched their first antidepressant prescribed. RESULTS: Among the 39,513 patients who met inclusion criteria, 25.4% had potential contraindicated or major interactions, 36.1% had moderate interactions, and 38.5% had minor or no interactions. Compared to the moderate/minor/no interactions groups, the contraindicated/major group had a greater prevalence of medical comorbidities and higher common toxicity indices (p < 0.001). Amitriptyline hydrochloride was involved in 19.1% of the potential contraindicated major interactions. Tramadol hydrochloride and oxycodone, opioid analgesics, were the most common medications with contraindicated/major interactions. Presence of contraindicated/major and moderate interactions was associated with an increased probability of switching to a different antidepressant of 23 and 11 percentage points, respectively (p < 0.001) and decreased probability of discontinuing of 3.5 and 2.5 percentage points (p < 0.001), after controlling for age, gender, pre-period medical disorders, antidepressant and non-psychotropic medications. CONCLUSIONS: Elderly antidepressant users frequently use medications with the potential for interactions with their antidepressant medication. There is a need for antidepressants with improved interaction profiles.

ADHERENCE AND PERSISTENCE TO SECOND-GENERATION ATYPICAL ANTIPSYCHOTIC MEDICATIONS IN PATIENTS ENROLLED IN EMPLOYER-SUPPORTED HEALTH PLANS


OBJECTIVES: Patients prescribed a regimen of atypical antipsychotic medications face many challenges. Adherence and persistence rates are typically low. We investigated determinants of adherence and persistence to second-generation antipsychotic medications (SGAs) for patients with schizophrenia and bipolar disorder, including financial factors (patient cost-sharing and out-of-pocket burden) and formulary status. METHODS: A retrospective study of patients aged 18-64 years with at least one SGA claim, 24 months of continuous enrolment and employer-based coverage via 16 US firms in 2003–2006 (n = 9,714). The study initiation index date was defined as the first SGA fill following a 12-month period without use of SGAs. Multivariate Cox proportional hazards models were estimated for persistence to SGAs (using a 30-, 60- and 90-day gap in therapy) and multivariate cross-section/time-series models were estimated for SGA adherence (PDC > 80%). Explanatory variables included patient, plan, and provider characteristics, health status, cost-sharing (prescription drug and medical) and time. An empirical measure of SGA formulary status was developed. RESULTS: Over three quarters of patients (83%) discontinued SGA treatment and average persistence until a 90-day gap was 184 days. Higher prescription drug and office visit patient cost-sharing amounts were associated with shorter time on SGAs, especially when cost-sharing exceeded $40 per fill or visit (95% confidence interval hazard ratio for 90-day gap = 1.001 for prescription drug, 1.002 for office visit) relative to cost-sharing of <$5. Higher prescription drug cost-sharing and patient total (drug and medical) out-of-pocket burden (measured in the previous 12 months) were associated with lower levels of adherence (both p < 0.01). CONCLUSIONS: Even in a well-insured patient population, benefit plan design factors can affect adherence and persistence to SGAs for patients with schizophrenia and bipolar disorder. Insurers and plan managers should take note of the prescription drug and medical plan design attributes that influence adherence to medications among this vulnerable patient group.