PATTERNS IN PRESCRIPTIONS OF ANTIPSYCHOTICS FOR PATIENTS WITH MOOD DISORDERS AND THEIR OUTCOMES
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OBJECTIVES: To determine patterns in the prescriptions of antipsychotics in patients with mood disorders. To investigate adverse effects of antipsychotics in patients with mood disorders and their relationship to other prescription drugs. METHODS: The MarkerScan database, for year 2000, containing information on outpatient doctor visits and consumption of prescription drugs on millions of Americans with health care coverage was used. Patients with at least a mood disorder were identified by ICD9 codes. Their prescription drug record for this year was also identified. This was populated with drugs names by NDC codes tables from the FDA website. Antipsychotic drug use was categorized as first generation or second generation and logistic regression was used to determine odds ration controlling on demographics. Furthermore, patients were classified as having a metabolic disorder, such as hyperglycemia or diabetes, and were compared controlling for the generation of antipsychotic. The data were also analyzed using data mining techniques such as cluster analysis and link analysis. RESULTS: Antipsychotics were highly used in the treatment of mood disorders. Second generation antipsychotics were prescribed almost two times more often than first generation antipsychotics. The odds of having a metabolic disorder are almost 50% higher for patients using second generation antipsychotics than for patients using first generation antipsychotics. Cluster analysis shows that antipsychotic and other chronic diseases are rather common among patients with mood disorders. Link analysis shows more use of second generation antipsychotics is strongly connected to the use of antidepressants. CONCLUSIONS: These findings suggest that people taking second generation antipsychotics should be closely monitored for the development of metabolic disorders. More efforts should be made to investigate the association between chronic diseases and mood disorders.

DESCRIPTIVE UNDERSTANDING OF DIAGNOSED OPIOID MISUSERS VERSUS OTHER OPIOID USERS
Van Eeden FD, Parham PD, Cochran BT, Carter JT, Valuck RJ

PMH3

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OBJECTIVE: To identify and differentiate legitimate opioid users from misusers and non-misusers and characterizes them by potential risk factors that may help medical decision-makers identify and differentiate legitimate opioid users from misusers. METHODS: Patients with at least one opioid claim were identified in the commercial and Medicare MarketScan databases from January 1, 2000—December 31, 2008, and subjects with at least one opioid claim from the diagnosis of opioid abuse or dependence (ICD-9 304.0x or 305.3x) were classified as misusers. Misusers were compared to other opioid users on demographics, comorbidities, pharmacy use, and medical service utilization. RESULTS: Of 2,841,793 opioid users who met all inclusion criteria, 2913 were diagnosed misusers. Mean age for misusers and non-misusers was 38 and 48 years respectively (<0.0001); misusers used more opioids in 2 years than non-misusers: 273 days supply versus 33 days (p < 0.0001); 2.4 different short-acting opioids (SAO) versus 1.4 (p < 0.0001); 1.4 different long-acting opioids (LAO) versus 1.1 (p < 0.0001). Misusers used more pharmacies than non-misusers: 3.3 different pharmacies versus 1.4 (p 0.0001); 1.4 different long-acting opioids (LAO) versus 1.1 (p < 0.0001). Misusers used more pharmacies than other opioid users: 3.3 different pharmacies versus 1.4 (p 0.0001). Misusers used more medical services (PMV) than non-misusers: 13.8 physician visits versus 6.5 (p < 0.0001); 9.0 OP mental health visits versus 0.7 (p < 0.0001); 0.8 AP admissions versus 0.1 (p < 0.0001). 54% of misusers had comorbid substance abuse versus 1% of non-misusers (p < 0.0001). Misusers used key concomitant drugs more than non-misusers: 22.7 gabapentin use versus 4.5% (p < 0.0001); 8.1% buspirone hydrochloride use versus 1.1% (p < 0.0001); 52.6% benzodiazepine use versus 19.5% (p < 0.0001); 44.7% SSRI use versus 14.6% (p < 0.0001). Psychiatric comorbidity and polypharmacy also significantly contributed to total expenditures by 13–30% (p < 0.0001). CONCLUSIONS: Among patients with MetS, psychiatric comorbidity and polypharmacy are associated with higher risk of hospitalization and expenditures in SGA users than non-SGA users. Findings suggest discussions should consider patients’ psychiatric comorbidity and polypharmacy burdens when prescribing SGAs.

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NURSING HOME USE OF ATYPICAL ANTIPSYCHOTICS FOR BEHAVIORAL AND PSYCHOLOGICAL PROBLEMS OF ELDERLY WITH DEMENTIA: A SYSTEMATIC REVIEW
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OBJECTIVES: The key objective of this study was to review evidence regarding off-label use of atypical antipsychotics for treating behavioral problems in patients with Dementia of Alzheimer’s type. A secondary objective was to examine patterns of atypical antipsychotic drug use in this population with respect to the extent and type of neurological and mental health co morbidities. METHODS: National Nursing Home Survey (NNHS, 2004), a nationally representative survey of US nursing home residents, was utilized to identify residents with senile dementia of the Alzheimer type (SDAT). Variables that represented attention to dementia care and special services for behavioral problems were analyzed to understand treatment patterns and associated medication use. Relationships between atypical antipsychotic drug use and the type and extent of neurological and mental health co morbidities were discerned using appropriate bivariate and multivariate statistics. RESULTS: The un-weighted resident sample yielde-related (18.5%) cases of SDAT, with more women (77.2%) than men. More than half of the residents diagnosed with the condition belonged to the age group 70 years or older. While 166 (8.5%) residents participated in a special program for dementia, about 238 (12.15%) of the residents received special services for behavioral problems. A large percentage of atypical antipsychotics were being prescribed at lower doses and lower doses of atypical anti-psychotic medications. Prevalence of neurological and mental health co morbidities varied from 37% (Depression), 7.8% (Psychosis), 3.9% (agitation) to 1.8% (Schizophrenia). CONCLUSIONS: Prevalence of SDAT increases with age. The use of atypical antipsychotics in the segment of the nursing home population and a substantial portion of prescribing may be off-label, especially when used for the treatment of behavioral problems. Existence of co morbidities may be a contributing factor to the increased prescribing of atypicals in nursing homes.