ANALYSIS OF ANTIDEPRESSANT MEDICATION UTILIZATION AND ADHERENCE OF MANAGED CARE PATIENTS ENROLLED IN A MEDICATION ADHERENCE PROGRAM

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OBJECTIVE: To examine antidepressant medication utilization and adherence of managed care patients enrolled in a medication adherence program. METHODS: This was an aggregate, retrospective cohort analysis of pharmacy and eligibility claims databases from four health plans. The study cohorts included antidepressant new starts (no antidepressant in the previous 4 months) 18 years or older between September 1, 2001 and July 31, 2002 who were continuously enrolled during the study period and were nonadherent with therapy. The nonadherent criteria for 3 plans was >10 days late in filling medication and was >20 days late for 1 plan. The intervention cohort consisted of patients enrolled in the program whose physicians were notified of nonadherence in filling antidepressant medications. The control cohort included nonadherent patients not enrolled in the program. A t-test was used to evaluate differences in medication utilization. A multivariate linear regression analysis was performed to estimate the association of the intervention with medication adherence (defined as medication possession ratio [MPR]) when adjusted for relevant covariates. RESULTS: The control (N = 13,152) and intervention (N = 2296) cohorts were comparable in age and gender; however, the control had a higher mean copay per patient per prescription ($16.93 vs. $12.33; p < 0.0001). Six-month evaluation of antidepressant pharmacy claims showed the intervened patients had a higher average number of prescriptions (4.5 vs. 4.1), quantity dispensed (213 vs. 164) and days coverage (140 vs. 124); p < 0.0001. The intervention cohort lowered the mean number of gap days between medication fills (32 vs. 54; p < 0.0001) and improved mean MPR (81% vs. 67%; p < 0.0001). Multivariate analysis demonstrated MPR was associated with enrollment in the program (p < 0.0001), copay (p = 0.0131), therapy initiation with selective serotonin inhibitors (p < 0.0001) and >20 day nonadherent criteria (p < 0.0001). CONCLUSIONS: Antidepressant medication utilization and adherence can improve with physician notification of nonadherent patients. The nonadherent criteria of >20 days negatively impacted the aggregate MPR.

PEDIATRIC ANTIDEPRESSANT PRESCRIPTION PATTERNS

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OBJECTIVE: Prevalence of Major Depressive Disorder (MDD) ranges from 3% to 8% in children and adolescents. Numerous antidepressants exist, but only fluoxetine is indicated for pediatric MDD. Recent federal acts require pharmaceutical companies to evaluate efficacy and safety of products in pediatric populations. However, to most effectively treat their pediatric patients, physicians will use the best available resources even if it means prescribing antidepressants off-label. In light of recent warnings and concerns regarding antidepressants in pediatric populations, the purpose of this study is to examine use of antidepressants, prescriber specialties prescribing antidepressants and persistency of antidepressants in children and adolescents. METHODS: Using a geographically diverse and representative prescription database, patients between 5 and 17 years of age who filled a first prescription for an antidepressant between July 21, 2001 and April 19, 2002 were identified and grouped as children (5–11 years) or adolescents (12–17 years). Antidepressants were categorized by drug class: tricyclic antidepressants (TCA), selective serotonin reuptake inhibitors or serotonin-norepinephrine reuptake inhibitor (SSRI/SNRIs) and newer generation antidepressants (NGAD). Prescribers were categorized by specialty: psychiatrists, pediatricians, primary care physicians (PCPs), and other. RESULTS: There were 100,280 children (64.1% males) and 237,236 adolescents (45.3% males). Among children and adolescents, 54.5% and 67.3%, respectively, of new product starts were for an SSRI/SNRIs; only 21.4% and 23.3%, respectively, started on fluoxetine. For children and adolescents, psychiatrists were least likely to prescribe a TCA. Psychiatrists and pediatricians were most likely to prescribe SSRI/SNRIs to children; PCPs and pediatricians were most likely to prescribe SSRI/SNRIs to adolescents. For children and adolescents, persistency was longest for SSRI/SNRIs. CONCLUSIONS: These results indicate that in pediatric populations there is either considerable off-label use of anti-depressants or that these products are used for indications other than MDD. These results have risk management implications and may facilitate further investigation of pediatric antidepressant use.

PEDIATRIC MEDICATION USE AND RISK OF SUICIDE ATTEMPT IN ADOLESCENTS WITH MAJOR DEPRESSIVE DISORDER

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OBJECTIVE: To investigate a hypothesized link between antidepressant (AD) drug use in pediatric patients with major depressive disorder (MDD) and an increased rate of suicide attempts. METHODS: A retrospective cohort study was conducted using claims data from the PharMetrics Integrated Outcomes Database from 1997–2002. Adolescents (aged 12–18 at time of MDD diagnosis) who were continuously enrolled in a managed health plan; had no prior diagnosis of MDD, AD use, or psychotherapy for one year; and had at least 6 months of follow-up data were included. Cox Proportional Hazard models were created to evaluate the multivariate relationship between AD use and time to suicide attempt, controlling for calendar year, demographic and clinical characteristics, and patient compliance. AD use was measured using pharmacy claims; suicide attempts were measured using ICD-9 codes in any health care setting. RESULTS: A total of 15,826 subjects (63% of whom were female) met inclusion criteria. AD treatment with any class of drugs did not increase the risk of suicide attempt (all Hazard Ratios NS). No statistically significant differences were found between more- and less-activating agents. AD treatment for less than 6 months was associated with increased risk of suicide attempt: subjects taking AD for 1–55 days (HR = 2.93, 95% CI = 1.34–6.39) or 56–179 days (HR = 3.26, 95% CI = 1.81–5.87) were more likely than subjects taking AD for 180 days or more to attempt suicide. Adolescent females, those receiving psychotherapy within 90 days of MDD diagnosis, those with diagnosed substance abuse, schizophrenia, or another mental health disorder, those with more chronic diseases, and those in the Midwest and West were independently at greater risk for suicide attempts. CONCLUSIONS: Antidepressant drug use had no independent effect on the likelihood of suicide attempt for a large cohort of adolescents across the U.S. The relationship between AD drug use and suicidality is complex and requires further investigation.