TRENDS AND PATTERNS IN THE DIAGNOSIS AND PRESCRIBING OF PSYCHOTROPIC MEDICATIONS IN CHILDREN AND ADOLESCENTS WITH ADHD.

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OBJECTIVES: Our study seeks to assess national variations in physician diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) and test a hypothesis that family practitioners are more likely to diagnose and prescribe medications for ADHD than specialists. Further, the study seeks to examine trends and patterns in the use of stimulant medications in children and adolescents with ADHD. METHODS: We used data from National Ambulatory Medicare Care Survey (NAMCS), an on-going annual survey among a random sample of US office-based physicians to identify the trends in the number of ADHD-diagnosed patients and rate of ADHD-related visits were analyzed using a weighted sample of youths aged 18 years and younger and trends were tracked for diagnostic prevalence and psychotropic medication use for the years 2003–2006. Utilization of psychotropic medications by diagnostic type was monitored on a yearly basis and claims were attributed to the second line ADHD.

RESULTS: A total of 5,319,764 visits having ADHD as primary diagnosis were identified in 2006, representing an increase of about 11% from 2003. The primary diagnosis of ADHD was made increasingly by non specialist physicians (pediatricians, family practitioners, internists and others; from 43.3% in 2003 to 64.9% in 2006) compared to specialists (child and general psychiatrists and neurologists) during the period covered. As per physician diagnosis of ADHD rose from 32.5% in 2003 to 53% in 2006, diagnosis by child psychiatrists declined significantly from 37.3% to 18.9% (P < 0.05) during the same period. The prescribing of long-acting stimulants increased from 42.8% in 2003 to 47.1% in 2006, and an opposite trend was observed for the short-acting agents during the same period (decreased by 8.5%). CONCLUSIONS: Nonspecialist physicians are more likely to diagnose ADHD and prescribe psychotropic medications than specialists, further underlining the controversy surrounding ADHD treatment. Dramatic changes in the patterns of psychotropic medication use in outpatient medical practice may be a cause for concern.

Abstracts

LONG-TERM OUTCOMES AFTER SWITCHING FROM TYPICAL ANTIPSYCHOTICS TO OLANzapine AMONG SCHIZOPHRENIA PATIENTS IN JAPAN

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OBJECTIVES: To assess the long-term clinical, functional and safety-related outcomes following a switch from typical antipsychotics to olanzapine in the treatment of schizophrenia patients in Japan. METHODS: Using data from a large 1-year prospective, multi-center, observational non-interventional study of individuals who were initiated on olanzapine for the treatment of schizophrenia in Japan, patients who were switched from any oral typical antipsychotic to olanzapine were identified. Changes from baseline to endpoint in clinical and functional measures and in body weight were evaluated. Mixed model with repeated measures, controlled for baseline demographics, were applied. RESULTS: Of 262 patients who switched from typical antipsychotics to olanzapine, 41% were outpatients and 59% inpatients. Most of these patients (71.0%) were switched due to poor medication efficacy and 25.6% due to medication intolerance. Participants, on average, were chronically ill, in their late 40's, with a 20-year history of schizophrenia. About half (51.9%) were male. Most patients (71.4%) completed the 1-year study. Clinically meaningful and statistically significant (p ≤ 0.05) improvements from baseline to the final study visit were observed in patients' illness severity and quality of life, with improvements in overall symptom severity level and in positive, negative, depressive and cognitive symptoms. Most patients (58.3%) demonstrated a treatment response to olanzapine and 47.4% achieved symptom remission. Mean weight gain from baseline to endpoint was 2.31 ± 4.72 kg, with 30.4% of patients experiencing clinically meaningful weight gain (at least 7% of baseline weight). Most (73.6%) patients maintained their initial BMI category at baseline. CONCLUSIONS: During the long-term naturalistic treatment of schizophrenia patients in Japan, the switching from typical antipsychotics to olanzapine appears to result in significant improvements in patients' clinical and functional outcomes, this is associated with clinically meaningful weight gain in one-third of patients. Findings highlight the potential benefits and risks associated with switching to olanzapine following failure on typical antipsychotics.

PATIENTS' EARLY PERCEPTIONS OF MEDICATIONS' BENEFITS PREDICT SUBSEQUENT RESPONSE IN THE TREATMENT OF SCHIZOPHRENIA

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OBJECTIVES: To assess whether a brief and simple assessment of patients' early perceptions of medications' benefits can predict subsequent response or non-response to continued treatment with the same antipsychotic medication. METHODS: This post-hoc analysis used data from a cost-effectiveness study of antipsychotics in the treatment of schizophrenia (HGCG) in which the Rating of Medication Influences scale (ROMI) was assessed following 2 weeks of treatment. Patients rated ROMI items on a scale from 1 (no agreement) to 3 (strong agreement). Patients' scores on the ROMI's "Perceived Medication Benefits," a 4-nm subscale identified in prior research, were used to predict subsequent response to continued treatment with the medication at Week 8. Response was defined as at least 20% reduction on the Positive and Negative Syndrome Scale (PANSS) total score from baseline to Week 8. Logistic regression was used to assess whether the ROMI "Perceived Medication Benefits" score was a strong predictor of subsequent response and identify cutoff scores for the prediction model. Analysis was conducted on 439 patients who had PANSS and ROMI data at the 2-week and 8-week time points. RESULTS: A score of 2.75 or higher on the Perceived Medication Benefits subscale at Week 2 predicted subsequent response (per PANSS at Week 8 with high specificity (72%) and negative predictive value (70%), moderate sensitivity (44%) and positive predictive value (47%) and with a 38% misclassification rate. CONCLUSIONS: A brief assessment of patients' early perceptions of medications' benefits (at Week 2) appears to be a useful tool to predict subsequent response to continued treatment with the same medication. Predictive values appear comparable to those reported in prior studies in which early response was assessed with a clinician-rated symptom scale, which requires special training and repeated assessments. Further research is needed to replicate the current findings.

DISCRETE EVENT SIMULATION MODEL IN MAJOR DEPRESSIVE DISORDER: LIFE-TIME HEALTH OUTCOMES OF ADJUNCTIVE ATYPICAL ANTIPSYCHOTICS

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OBJECTIVES: Adjunctive treatments with atypical antipsychotics have demonstrated efficacy in major depressive disorder (MDD) patients that respond insufficiently to conventional antidepressants. As most trial designs have limited duration, simulation allows for extrapolation, to inform on optimal treatment sequences over a longer period. We estimated the life-time health outcomes for augmentation therapies with atypical antipsychotics in MDD patients who fail to respond to conventional antidepressants. METHODS: A discrete event simulation model was used to simulate MDD patients between major depressive episodes (MDEs) and remission periods over life-time based on published data. During MDEs, patients were treated with adjunctive aripiprazole, quetiapine or olanzapine. Patients who did not respond at 6 weeks were switched to subsequent treatment lines. Comparative effectiveness between treatments starting on adjunctive aripiprazole spent less time in MDEs compared to quetiapine (0.11 years) and olanzapine (0.17 years) and had an improvement of 0.06 and 0.04 quality adjusted life years respectively. PSA estimated an 88% and 80% probability of remaining in remission for quetiapine and olanzapine treatment, respectively. CONCLUSIONS: This novel DES model is well suited to account for the highly heterogeneous patient population, the deteriorating disease course and the use of different sequential treatment alternatives that is specific to MDD. The results indicate