outpatient (OP). Clinical outcome was measured by change in CGI-S (IP = 3.49, OP = 4.27, P< .001) and GAF (IP = 51, OP = 39, P = .017). Service utilization was calculated for hospitalization (IP = $424, OP = $5209, P< .001), ER visits (IP = $140, OP = $1155, P<.001), medication costs (IP = $5453, OP = $13530, P< .001), and total costs (IP = $9654, OP = $23104, P<.001). There was no statistical difference between groups in outpatient utilization costs. **Conclusion:** Exploratory research generally utilizes small sample sizes and, thus, findings are typically not generalizable to the population at large. Nevertheless, the present study strongly suggests that LAIs initiated in an inpatient setting decrease re-hospitalization rates and improve functioning 1 year post initiation. Further research is needed to determine the additional financial and therapeutic merits that could exist with open access to LAIs at inpatient facilities.

A Study on Drug-Related Problems in Schizophrenia Patients at Outpatient Department

Thanarat Suansanae, BPharm, BCPP[1], Thanompong Sathienluckana, PharmD, BCPP[2]

1. Faculty of Pharmacy, Mahidol University, Bangkok, Thailand; 2. Faculty of Pharmacy, Siam University, Bangkok, Thailand

Abstract Type: Original Research. **Background:** Schizophrenia is a chronic psychiatric disorder which needs long-term antipsychotics therapy. In addition, other psychiatric and medical comorbidities are commonly found among patients with schizophrenia that increasing an opportunity for polypharmacy. Pharmacist can play an important role to identify, resolve and prevent drug-related problems (DRPs) which help to maximize efficacy and safety of medication use. **Objective:** To evaluate the frequency and type of DRPs in patients with schizophrenia **Methods:** This was an open-label, cross-sectional study in patients who visited at the outpatient department of Somdet Chaophraya Institute of Psychiatry, Thailand during February to June 2015. All patients who aged between 18-50 years whom were diagnosed schizophrenia according to DSM-IV within 10 years previously, had moderate to severe disease severity, received same antipsychotic agent with stable dose for at least 2 months, and gave informed consent by themselves and their caregiver. Patients who had mental retardation, or could not communicate effectively were excluded. DRPs were identified by patient interviewing and chart review by psychiatric pharmacist. Primary outcome was the frequency of DRPs. **Results:** A total of 41 patients were recruited and analyzed. Most of them were female (68.29%) and their mean age were 37.07 years. The mean duration of illness was 5.08 years. A total of 84 DRPs were identified (mean 2.05 DRPs per patient). Unnecessary drug therapy was the most commonly identified DRPs (50%) such as using anticholinergics for prevention of extrapyramidal side effects, combined long-acting injection with oral antipsychotics. Adverse drug reactions, inappropriate compliance, dosage too low, wrong drug and need additional drug therapy were found in 25, 10.72, 5.95, 4.76, and 3.57%, respectively. **Conclusions and Future Directions:** DRPs are very common in patients with schizophrenia. Pharmacist can play an important role to provide pharmacotherapy suggestion for resolving and prevention DRPs. Thus, further studies should be done to confirm that decreasing of DRPs in patients with schizophrenia can improve patient safety and treatment outcomes.

Adjunctive Amantadine Treatment for Aggressive Behaviors in Children: A Series of Eight Cases

Ian R. McGrane, PharmD, Joshua G. Loveland, PharmD, Heather J. Zaluski, MD

All parties are affiliated with Shodair Children's Hospital, Helena, MT

Abstract Type: Original Research. **Purpose:** Aggression is defined as overt behavior that has the intention of inflicting physical damage on another individual. Amantadine is a noncompetitive NMDA receptor antagonist which also increases synaptic dopamine. Amantadine has a growing body of evidence for use in aggressive behavior in patients with traumatic brain injury, autism spectrum disorder, and intellectual disability. We describe our experience with amantadine treatment for aggressive behaviors in eight hospitalized pediatric patients. **Methods:** We conducted a retrospective chart review of psychiatric inpatients admitted between 2013 and 2015 who were initiated on amantadine for the management of aggressive behaviors. Included patients received amantadine for a minimum of twenty days. Patients were excluded from this series if they were initiated on amantadine for an indication other than aggressive behavior or were taking amantadine prior to hospital admission. **Results:** The majority of patients were male (n = 7) with age ranging from 6 to 10 years (mean 8.5). The most common diagnoses were attention-deficit/hyperactivity disorder (n = 6), intermittent explosive disorder (n = 4), oppositional defiant disorder (n = 4), and bipolar disorder (n = 3). Six patients had borderline intellectual functioning and four had suspected in utero substance exposure. Multiple classes of medications had been tried prior to amantadine initiation. Mean adjunctive amantadine starting dose was 2.6 mg/kg/day and mean discharge dose was 6.7 mg/kg/day. The treating physician described five patients as significantly improved and three patients as moderately improved while taking amantadine. Average weekly seclusions were reduced from baseline in the first week of treatment (1.81, 95% CI [1.02, 2.61] versus 0.25, 95% CI [0.00, 0.55]). Weekly restraints and seclusions were reduced from baseline in the second week of treatment (1.56, 95% CI [0.45, 2.68] versus 0.00, 95% CI [0.00, 0.00] and 1.81, 95% CI [1.02, 2.61] versus 0.13, 95% CI [0.00, 0.35]) respectively. Amantadine caused no adverse events. **Conclusions and Future Directions:** Due to previously reported placebo response rates, our patients taking other mood stabilizing medications, and other limitations associated with retrospective reports, further evidence is needed to demonstrate the efficacy of amantadine for treatment of pediatric aggression.

An Economic Evaluation of Brexpiprazole Treatment in Adult Patients with Schizophrenia in the United States

Jesse Ortendahl, MS[1], Myrlene Sanon Aigbogun, MPH[2], Tanya Bentley, PhD[1], Ayanna Anene, BS[1], Ann Hartry, PhD[3], Ruth Duffy, PhD[2], Susan Legacy, MD, MS[2], Siddhesh Kamat, MBA[2]

1. Partnership for Health Analytic Research, LLC, Beverly Hills, CA; 2. Otsuka Pharmaceutical Development & Commercialization, Inc., Princeton, NJ; 3. Lundbeck LLC, Deerfield, Illinois,

Abstract Type: Original Research. **Background:** Although several second generation antipsychotics are available, heterogeneity of treatment response warrants the introduction of additional therapies. The objective was to examine the cost-effectiveness of brexpiprazole, a new antipsychotic, as monotherapy treatment of schizophrenia from a US payer perspective. **Methods:** A decision-analytic model estimated clinical outcomes and costs over 6 weeks in adults receiving (1) brexpiprazole 2mg; (2) brexpiprazole 4mg; (3) lurasidone 120mg; or (4) quetiapine XR 600mg. Clinical data were obtained from comparable phase 3 clinical trials of atypical antipsychotics and product labelling. Placebo-adjusted relative risks were used to estimate treatment efficacy. Costs included product acquisition, adverse event treatment, and patient monitoring. Cost-effectiveness was assessed in terms of cost per mean change in Positive and Negative Syndrome Scale (PANSS) and secondly cost per mean change in Clinical Global Impression – Severity