

The average cost per prescription was R634.76 for donepezil, and R551.35 for memantine. Only 5.27% of patients were prescribed more than one active ingredient for Alzheimer's disease during the year (mostly donepezil or galantamine, together with memantine). Average Prescribed Daily Doses (PDDs) of all active ingredients were generally lower than their respective Defined Daily Doses (DDD). The average PDD for donepezil was 7.45 mg (DDD = 7.5 mg), galantamine 13.56 mg (DDD = 16 mg), for memantine was 17.46 mg (DDD = 20 mg) and for rivastigmine was 6.89 mg (DDD = 9 mg). **CONCLUSIONS:** The results were similar to those of previous South African studies. Treatment outcomes could not be measured and it is recommended that qualitative studies be undertaken to determine the cost-effectiveness of the different treatment options according to family members and caretakers.

## PMH15

**INITIAL HIGH-DOSE PRESCRIPTION OF DULOXETINE IN PATIENTS WITH MAJOR DEPRESSIVE DISORDER: DEMOGRAPHIC AND CLINICAL PREDICTORS**

Liu X<sup>1</sup>, Gelwicks SC<sup>2</sup>, Able S<sup>1</sup>, Faries D<sup>2</sup>, Watson PR<sup>1</sup>, Robinson M<sup>2</sup>, Johnstone BM<sup>1</sup>  
<sup>1</sup>Eli Lilly and Company, Indianapolis, IN, USA, <sup>2</sup>Lilly USA, LLC, Indianapolis, IN, USA

**OBJECTIVES:** Prescribing an initial optimum therapeutic dose while avoiding dose-related side effects is important in the treatment of major depressive disorder (MDD). Many factors may influence a physician's decision on an antidepressant choice and starting dose. The purpose of the present study was to identify the pretreatment predictors of initial high-dose prescription of duloxetine in patients with MDD in real world clinical settings. **METHODS:** A total of 10,128 patients with MDD who were selected from a large commercially administrative claims database and were initiated on duloxetine between July 1, 2005 and June 30, 2006 were included in the analysis. Patients had no prescriptions of duloxetine in the 6 months prior to duloxetine treatment. For patients who had continuous enrollment for 12 months prior to duloxetine treatment, the associations between demographic characteristics and pre-initiation clinical variables in the prior 1 year and initial high-dose (>60 mg/day) prescription compared with average dosage (60 mg/day) prescription were examined by logistic regression. **RESULTS:** Of the sample, 31.2% were initially prescribed duloxetine less than 60 mg/day; 62.1%, 60 mg/day; and 6.8%, >60 mg/day. Compared with average-dose patients, high-dose patients had more comorbidities; used more benzodiazepine, anxiolytics, atypical antipsychotics, lithium, psychostimulants, and anticonvulsants; and used more medical care services with higher pharmacy and medical costs in the prior 1 year. After adjustment for health plan type and geographic region of residence, the following factors were independently associated with initial high-dose prescription: prior use of psychostimulants (OR = 1.45), no prior use of selective serotonin reuptake inhibitors (OR = 1.28), physician specialty (psychiatrist vs. non-psychiatrist, OR = 1.43), and high medical cost in the prior 1 year (OR = 2.12). **CONCLUSIONS:** Multiple demographic and clinical characteristics and prior health care service utilization are associated with initial high-dose duloxetine prescription. High-dose patients may represent a group of complex patients with high medical cost who need intensive medical intervention.

## PMH16

**PREDICTIVE FACTORS FOR HOSPITALIZATION IN FRENCH SCHIZOPHRENIC PATIENTS**

Sarlon E<sup>1</sup>, Dorey J<sup>1</sup>, Millier A<sup>1</sup>, Toumi M<sup>2</sup>

<sup>1</sup>CREATIV-CEUTICAL, PARIS, France, <sup>2</sup>University Claude Bernard Lyon I, Villeurbanne Cedex, France

**OBJECTIVES:** The appropriate and optimal health care resources of schizophrenic patients could benefit from identifying predictive factors for hospitalization. The purpose of this study was to identify those factors of hospitalization for French schizophrenic patients out of a 2 years prospective cohort of 288 patients. **METHODS:** This study collected clinical, patient reported outcomes, patient management, care giver involvement and resource utilizations data every six months. The patients who were at least once hospitalized during the study were compared to the patients who were not hospitalized during the study. Predictive factors of hospitalization were identified by using a Cox model with all appropriate variables. **RESULTS:** To be under antidepressant/depressed, to have negative attitude toward medicine and former hospitalizations appear to be good predictors of hospitalisation in French schizophrenic patients. While living alone and subjective side effect were associated to reduce the risk of hospitalisation. Depression is known to be associated to poor outcome however few comprehensive studies include depression as a confounding factor. Negative attitude toward medicine as well as former hospitalisation are likely to be associated to increase the risk of hospitalisation. **Unexpectedly perceived side effects and living alone** were associated to reduce hospitalisation. The authors do not have clear explanation but hypothesis that would require to be tested in further studies. **CONCLUSIONS:** Unless appropriate confounding variables are included in resource utilization studies, results should be considered with great caution.

## PMH17

**PREVALENCE, INCIDENCE AND PERSISTENCE OF ANTIDEPRESSANT DRUG PRESCRIBING IN THE ITALIAN GENERAL POPULATION: RETROSPECTIVE DATABASE ANALYSIS**

Menditto E, de Portu S, Citarella A, Cammarota S, Riegler S, Mantovani LG  
 University of Naples, Naples, Italy

**OBJECTIVES:** to assess the prevalence, incidence and persistence of AntiDepressant (AD) drug therapy in an area of Campania, a region in the South of Italy, during the years 2005–2007. **METHODS:** we collected, from an administrative prescription

database covering a population of 441,317 individuals, all prescriptions for ADs reimbursed in the years 2005–2007. We calculated the number of subjects receiving at least one ADs prescription, to estimate the annual prevalence and incidence of AD users. Among incidence users we evaluated the percentage of individuals remaining on therapy at 12 months following the first observed AD prescription. The cumulative persistence of each medication was estimated using the Kaplan-Meier method. We identified users of different ADs types: tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs) and other antidepressants. **RESULTS:** A progressive rise in prevalence rates was observed during the 3-years period. 1-year prevalence of AD use was 5.08 per 100,000 inhabitants in the year 2007. Prevalence was higher for females (2005: 5.67; 2006: 6.15; 2007: 6.61) and increased during three years period with increasing age. Prevalence of SSRI usage markedly increased from 3.45 in 2005 to 4.04 in 2007. A 1-year incidence of AD treatment was 2.79 per 100,000 person-year in 2006. SSRIs accounted for almost two-thirds of total new treatments with ADs. The analysis of therapy persistence revealed that the 80% of AD users discontinued medication within 60 days; there are no difference among different drug classes. **CONCLUSIONS:** The results of the study indicated an increasing prevalence of AD medication usage during the 2005–2007 years. This increase appears to be mostly related to SSRI, in particular those recently marketed. The non-persistence is very frequent in AD users, only rarely the duration of treatment was consistent with recommendations for depression therapy.

## PMH18

**SCHIZOPHRENIA MODELING: FACTORS ASSOCIATED WITH THE RISK OF BEING IN A SPECIFIC DISEASE STATE**

Dragomir A<sup>1</sup>, Angers JF<sup>1</sup>, Tarride JE<sup>1</sup>, Rouleau G<sup>1</sup>, Drapeau P<sup>1</sup>, Perreault S<sup>1</sup>

<sup>1</sup>University of Montreal, Montréal, QC, Canada, <sup>2</sup>McMaster University, Hamilton, ON, Canada

As a first step to model schizophrenia, we are proposing a research project aimed at better understanding the factors associated with specific disease states associated with schizophrenia. **OBJECTIVES:** To evaluate the factors associated with the risk of being in a specific disease state of schizophrenia. **METHODS:** The model was based on data from RAMQ and Med-Echo databases. A total of 12,754 newly diagnosed patients with schizophrenia patients were identified. Six discrete disease states were defined within the model (first episode—FE, low dependency state—LDS, high dependency state—HDS, Stable, Well and Death) and patients' movements between these disease states enabled 17 risks to be identified. To evaluate factors associated to the risk of being in each disease state, we constructed five risk functions based on Cox proportional hazard analysis for competing risks. The risk factors included in the models were age, gender, social assistance status, severity of schizophrenia, depression, anxiolytic drugs use and other mental disorders. **RESULTS:** After the FE of schizophrenia, 69.8% of patients transitioned to LDS, 11.2% to HDS, 1% to the death state and 18% into the Well state. Being male (HR: 0.93, 95% CI: 0.89–0.97) or older (HR: 0.94, 95% CI: 0.91–0.96) was associated with a decreasing risk of moving to LDS after being FE. In contrast, being on social assistance, depressed, using anxiolytic drugs or being diagnosed with other mental disorders were associated with an increased risk of being in a LDS after a FE, ranging from 1.11 to 1.55 folds. **CONCLUSIONS:** Some of our results are consistent with those obtained from the published literature. Based on these risk functions we estimate individual transition probabilities that will be used in the first Canadian model of schizophrenia incorporating transition probabilities adjusted for individual risk factors profiles using Canadian data.

## PMH19

**MEASUREMENT OF CHRONIC STRESS BETWEEN PEOPLE WORKING IN PROFIT-ORIENTED ENVIRONMENT**

Dér A<sup>1</sup>, Pakai A<sup>1</sup>, Németh K<sup>1</sup>, Kriszbacher I<sup>1</sup>, Zsigmond E<sup>1</sup>, Boncz I<sup>1</sup>, Vattay P<sup>2</sup>

<sup>1</sup>University of Pécs, Pécs, Hungary, <sup>2</sup>University of Pécs, Zalaegerszeg, Hungary

**OBJECTIVES:** In Western Hungary the number of women with hypertension increased with 21%, the number of patients with ischemic heart problems increased with 46% between 2005 and 2007. The most probable reason of this sudden increase among the life quality factors is the increasing of chronic stress. The rate of chronic stress and the effectiveness of coping were measured between workers from a regional multinational firm with a cross sectional examination in 2008. **METHODS:** Sampling is representative regarding to the Western Hungarian population, 900 workers were examined with unknown presumption. Data collection was made with Richard Rahe Short Questionnaire about Stress and Coping standard measurement device. The analysis of the data was done with SPSS 17.0 and Epi Info 3.5.1 programs, two sample t-test and logistic regression calculation was made. **RESULTS:** From the five scales measuring stress women showed alarming signs on three scales (sanitary problems, psychological symptoms and the A- and C-type personal characteristic scales), and men on one scale (the A- and C-type personal characteristic). The difference is significant ( $p = 0.000$ ). From the five scales measuring coping men and women equally showed alarming signs on the social support scale as a deficit. Women fight against stress with less efficiency on the scale of habits related to health ( $p = 0.001$ ). The most defining stress indicating factor in case of man is sanitary problems (OR = 2.27,  $p = 0.02$ ), and personal characteristics in case of woman (OR = 3.34,  $p = 0.002$ ). The most important influencing factor in case of coping is the sense of coherence (at women OR = 7.9,  $p = 0.000$ , at men OR = 4.5,  $p = 0.000$ ). **CONCLUSIONS:** This survey shows that chronic stress is complex, but it can be examined individually and in teams with proper methods. This topic is current in relation to national health: chronic