

from an average of 7.8 to 16.4 DDD/capita between 1999 and 2008. Three groups of countries were identified: high, medium and low use of antidepressants countries. Overall, antidepressant growth was observed (41% to 325% range) and was more pronounced in low-use countries. By 2008, SSRIs were the predominant class in all countries; followed by SNRIs whereas TCAs consumption went down. Over the studied period, GDP and HE growth were aligned across countries; PE growth was associated with antidepressant expenditures. **CONCLUSIONS:** Countries with lower GDP / capita (and higher GDP growth) and lower baseline antidepressant volumes are heading in the same direction as the higher income countries did in the past, recording a 200-300% volume growth between 1999 and 2008). This offers a unique opportunity to monitor the anticipated health outcomes of their prescription, which were missed in the past and which are valuable for future mental health policy.

#### PMH67

##### CHARACTERISTICS OF PRESCRIPTION AND NON PRESCRIPTION SLEEP MEDICATION USERS IN THE UNITED STATES

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**OBJECTIVES:** Sleep deprivation and disturbances can result in lowered productivity and increased errors/accidents. Existing research has documented higher use of sleep medications among women; however, little is known about other factors such as race, ethnicity and its association with the use of sleep medications in a nationally representative study sample. The objective of this study was to investigate the relationship of various factors such as race, ethnicity, gender, employment status with the use of sleep medications in the US population. **METHODS:** A retrospective, cross-sectional study design was used. Data from the 2009 Medical Expenditure Panel Survey, a nationally representative survey of US population, were used for this analysis. The study population included all survey respondents over the age of 18. A multiple logistic regression model was built to analyze odds of reporting use of prescription or non prescription sleep medication. **RESULTS:** Of the total 20568 survey respondents, 8.28% (n = 1703) used some type of medication to fall asleep in the year 2009. The odds of reporting use of sleep medication were significantly higher among females (OR=1.404 CI 1.254-1.571) compared to males. The odds of sleep medication use were significantly lower among African American (OR= 0.529 CI 0.453-0.617), Asian American (OR= 0.387 CI 0.283-0.530) and Hispanic (OR= 0.717 CI 0.621- 0.828) women compared to Non Hispanic Caucasian women. Unemployment (OR=1.909 CI 1.674-2.178) and depression (OR=5.009 CI 4.446-5.643) were highly correlated with use of sleep medications. Additionally, compared to lower income levels, higher income levels had lower odds of sleep medication use. **CONCLUSIONS:** Unemployed Non-Hispanic Caucasian women in low income households are more likely to use prescription or non prescription sleep medications. Further research on why such differences exist is necessary. The factors identified in this study should be further investigated to identify vulnerable populations to investigate underlying causes of sleep disorders.

#### PMH68

##### DAILY AVERAGE CONSUMPTION AND COSTS OF DULOXETINE IN MOOD AND PAIN AMONG COMMERCIALY INSURED PATIENTS IN 2011 IN THE UNITED STATES

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**OBJECTIVES:** To evaluate daily average consumption (DACON) and average daily costs (ADC) of duloxetine for patients with various pain and mood conditions subsequent to the recent FDA approval of duloxetine in the management of chronic musculoskeletal pain. **METHODS:** Retrospective analysis of commercially insured patients prescribed duloxetine between January 1, 2011 and September 30, 2011 using the IMS Longitudinal Prescription and Medical Claims Database. This analysis focused on patients diagnosed with only one of the following: chronic lower back pain (CLBP), osteoarthritis (OA), fibromyalgia (FM), diabetic peripheral neuropathic pain (DPNP), major depressive disorder (MDD), and generalized anxiety disorder (GAD). Patients were assigned to study cohorts based on ICD-9 codes recorded within -180/+07 days of the date of the first duloxetine prescription filled during the study interval. DACONs were defined as weighted averages of the total number of pills dispensed by total days of supply across pill strength for all patients within each cohort. DACONs were converted to ADCs using January 2011 average wholesale prices (AWP). A second analysis based on prescriptions between January 1, 2010 and September 30, 2010 was conducted for comparative purposes. **RESULTS:** A total of 553,253 duloxetine patients were included in the analysis. DACONs were 1.27 for CLBP, 1.26 for OA, 1.28 for FM, and 1.27 for DPNP, versus 1.44 for MDD ( $p < 0.0001$  for each of the four pain conditions) and 1.32 for GAD. The resulting ADCs for the four pain conditions varied only slightly, from \$6.99 for OA to \$7.13 for FM. ADC for MDD was notably higher (\$8.00). The overall DACON for 2011 represented a modest decline from 2010, most notably for CLBP and FM (to 1.35 and 1.33, respectively;  $p < 0.0001$  for both). **CONCLUSIONS:** 2011 DACONs and ADCs varied little across the four chronic pain conditions for which duloxetine has been approved for use by the FDA, all of which were significantly lower than for MDD.

#### PMH69

##### DEPRESSION TREATMENT AND SHORT-TERM HEALTH CARE EXPENDITURES AMONG ELDERLY MEDICARE BENEFICIARIES WITH CHRONIC ILLNESS

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**OBJECTIVES:** To determine the association between depression treatment and short-term health care expenditures using a nationally representative sample of Medicare beneficiaries with chronic physical illnesses and depression. **METHODS:** We employed a longitudinal design and used data from 2000 through 2005 of the Medicare Current Beneficiary Survey, a nationally representative survey of Medicare beneficiaries. Two years of observation, yielding five cohorts were used to measure depression treatment in the baseline year and health care expenditures in the second. The bivariate relationship between depression treatment in baseline year and health care expenditures in the follow-up year was tested with t-tests. Ordinary least squares (OLS) regressions on logged dollars were used to assess the relationship between depression treatment and health care expenditures after controlling for demographic, socio-economic, health status, and lifestyle risk factors. **RESULTS:** Compared to no depression treatment (\$16,795), the average total expenditures were higher for those who used antidepressants only (\$17,425) and those who used psychotherapy with or without antidepressants (\$19,733). After controlling for the independent variables, antidepressant use and psychotherapy with or without antidepressants were associated with 21% and 31% increase in total expenditures, respectively. For each expenditure type except for the other category, we observed a statistically significant relationship between depression treatment and expenditures. **CONCLUSIONS:** Among the elderly with chronic physical illnesses, depression treatment was associated with greater short-term health care expenditures. Future research needs to examine whether this relationship remains over a longer period of time.

#### PMH70

##### MEDICATION ADHERENCE AND PERSISTENCE IN PATIENTS TREATED WITH DULOXETINE

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**OBJECTIVES:** The purpose of this study was to compare adherence and persistence for patients treated with duloxetine across several diagnoses categories: major depressive disorder (MDD), fibromyalgia (FM), osteoarthritis (OA), and chronic lower back pain (CLBP). **METHODS:** Patients age 18-64 initiating duloxetine treatment during 2008 were identified in the Thomson Reuters MarketScan® Database. The index event was defined as the first duloxetine prescription filled during the study period with no duloxetine coverage during the previous 90 days. Patients were assigned to disease-category cohorts on the basis of ICD-9 codes recorded on medical claims dated within +1/- 3 month of the initial duloxetine prescription. Adherence was measured over both 365- and 90-day post duloxetine initiation periods as the percent of patients with a medication possession ratio  $\geq 0.8$ . Persistence was measured over a 365-day post-initiation period as the percent of patients with length of therapy  $\geq 180$  days.  $\chi^2$ -tests were used to compare differences in adherence and persistence across patient cohort. **RESULTS:** A total of 18,406 patients with one of the 4 identified diagnosis categories were identified as initiating duloxetine in 2008: MDD (8,334), FM (3,630), OA (1,458) or CLBP (4,984). Adherence was directionally greater among patients with MDD (37.3%) versus FM (35.3%) or OA (35.7%), and statistically significantly greater than CLBP (29.9%;  $p < 0.005$ ). Comparisons of 90-day adherences were similar, with MDD (58.8%) directionally higher than FM (54.1%) or OA (57.8%), and statistically significantly greater than CLBP (50.0%;  $p < 0.005$ ). Comparisons of persistence were similar to adherence. For example, persistence was 47.5% for MDD versus 38.7% for CLBP ( $p < 0.005$ ). **CONCLUSIONS:** Duloxetine adherence and persistence were similar among patients with MDD, FM, and OA, and significantly less among those with CLBP. These relationships were consistent across variations in technical assumptions employed in calculating the study measures.

#### PMH71

##### TREATMENT UTILIZATION PATTERNS AND EXPENDITURES IN DEPRESSED OLDER ADULTS IN THE UNITED STATES: RESULTS FROM MEDICAL EXPENDITURE PANEL SURVEY

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**OBJECTIVES:** The study examined antidepressant utilization patterns and expenditures in older adults in United States (US). **METHODS:** The study involved analysis of household and prescription files of the 2009 Medical Expenditure Panel Survey (MEPS) data. The study sample included all older adults ( $\geq 50$  years) with depression. The analysis focused on antidepressant classes, namely selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants (TCAs), serotonin-norepinephrine reuptake inhibitors (SNRIs), Monoamine Oxidase Inhibitors (MAOI), phenylpiperazine and tetracyclics. Descriptive weighted analysis was performed to examine antidepressant use patterns and prescription expenditures in community dwelling depressed older adults. **RESULTS:** According to the 2009 MEPS, 11.36 million older adults were diagnosed with depression for an overall prevalence of 11.50% (95% CI, 12.34- 47.50). Most older adults with depression were 50-64 years of age (66.79%), female (67.25%), and white (89.85%). Antidepressants were used by 78.61% (95% CI, 75.79- 81.43) of older adults with depression. The most prescribed class of antidepressants were SSRIs (54.86%), followed by SNRIs (18.49%), phenylpiperazine (7.92%), TCAs (6.96%) and tetracyclics (3.19%). Total antidepressant prescription expenditures were \$9.5 billion (95% CI, 8.3-10.7 billion). High expenditures were found for SNRI (\$4.3 billion, or 44.62% of antidepressant expenditures), followed by SSRI (\$3.5 billion, or 37.60%), TCA (\$172 million, or 1.8%), and phenylpiperazine (\$131 million, or 1.37%). The average prescription price was also highest for SNRI (\$181.56), followed by SSRI (\$49.22), tetracyclic (\$28.17), TCA (\$19.13), and phenylpiperazine (\$13.64). **CONCLUSIONS:** Depression is highly prevalent among older