PM505
THE RELATIONSHIP BETWEEN PSEUDOPHEDRINE SALES AND CLANDESTINE METHAMPHETAMINE LABS

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OBJECTIVES: The illicit production of methamphetamine from the precursor chemicals pseudoephedrine (PSE) is clandestine lab preparations in the United States with a greater number of clandestine labs, controlling for counties with no labs have a strong relationship to clandestine labs. Counties with greater sales of PSE to labs in both Kentucky and Illinois, but not Louisiana. Consulting, Cincinnati, OH, USA, 2Eli Lilly, Indianapolis, IN, USA, 3CTI Clinical Trial &

RESULTS: Results suggest that BZD use was associated with more pronounced comorbidities. This is known about its usage pattern, and treatment adherence among distinct age groups in Canada. This study sought to characterize utilization patterns of ADHD drugs approved for use in Canada with a special focus on the non-stimulant drug, atomoxetine. METHODS: Prescription data and anonymized longitudinal patient level data from IMS Brogan were used. Descriptive statistics were used to characterize drug utilization patterns from 2010-2014. Utilization trends were analyzed with respect to age, gender, and a concomitant mental disorders and the prescribing of the physician. Adherence patterns for atomoxetine were measured by the medication possession ratio (MPR). RESULTS: IMS data indicate that the average annual prescription volume of all ADHD drugs in Canada have been increasing each year (35% increase from 2009 to 2012). Methylphenidate stimulants accounted for approximately 70% of all prescriptions, and children 6-12 years accounted for most of these prescriptions. Prescriptions of atomoxetine showed the same increasing trends; however females aged 18-65 years accounted for most of this increase. ADHD drug use declined during the summer months and in 2013, over 20% of children aged 13-18 years had at least one gap of more than 30 days between the end of one prescription of atomoxetine and the start of the next prescription. In addition, 25-35% of this age group had an MPR of less than 80%. CONCLUSIONS: ADHD drug utilization has been increasing over the last 5 years in Canada. Children aged 6-12 years accounted for most of the prescriptions, and they are most likely to go on a “drug holiday”. Given that serious adverse reactions can be associated with ADHD drugs in some children, their clinical benefits should be continuously and closely monitored, and weighed against their potential risks.

PM510
USE OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) DRUGS IN CANADA, 2010-2014

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OBJECTIVES: The use of attention-deficit/hyperactivity disorder (ADHD) medications in children, adolescents and adults is known. Given the increasing demand for these drugs, it is important to review the prescribing patterns in different populations. METHODS: Prescription data and anonymized longitudinal patient level data from IMS Brogan were used. Descriptive statistics were used to characterize drug utilization patterns from 2010-2014. Utilization trends were analyzed with respect to age, gender, and concomitant mental disorders and the prescribing of the physician. Adherence patterns for atomoxetine were measured by the medication possession ratio (MPR). RESULTS: IMS data indicate that the average annual prescription volume of all ADHD drugs in Canada have been increasing each year (35% increase from 2009 to 2012). Methylphenidate stimulants accounted for approximately 70% of all prescriptions, and children 6-12 years accounted for most of these prescriptions. Prescriptions of atomoxetine showed the same increasing trends; however females aged 18-65 years accounted for most of this increase. ADHD drug use declined during the summer months and in 2013, over 20% of children aged 13-18 years had at least one gap of more than 30 days between the end of one prescription of atomoxetine and the start of the next prescription. In addition, 25-35% of this age group had an MPR of less than 80%. CONCLUSIONS: ADHD drug utilization has been increasing over the last 5 years in Canada. Children aged 6-12 years accounted for most of the prescriptions, and they are most likely to go on a “drug holiday”. Given that serious adverse reactions can be associated with ADHD drugs in some children, their clinical benefits should be continuously and closely monitored, and weighed against their potential risks.

PM510
AUDIT OF IRREVERSIBLE MONOAMINE OXIDASE INHIBITORS (MAO) PREScripTIoN FOR DEPRESSION IN CURRENT CLINICAL PRACTICE WITHIN THE HEALTH IMPROVEMENT NETWORK (THIN) UK PRIMARY CARE DATABASE

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OBJECTIVES: MAOIs were first discovered in the 1950s and used to manage depression when few alternatives existed. MAOIs block tyramine catalysis, meaning patients consuming tyramine rich foods (e.g. cheeses, cured meats) risk increased release of noradrenaline, potentially leading to hypertensive crisis. While MAOIs still have some role in depression management, little is known about current clinical practice. This study aims to audit the usage of MAOIs from 2004-2013. METHODS: The THIN database was used to identify all patients prescribed irreversible MAOIs between 01/01/2004-31/12/2013. Dates of first MAOI prescription and first depression diagnosis were identified, along with age, social deprivation score and repeat MAOI prescriptions. RESULTS: 886 patients were prescribed MAOIs during 2004-2013, 44% of which were new prescriptions. Median age at first use was 53years (IQR 43-63), MF ratio was 1:1.8 and 49% were in the 2 most affluent quintiles. The median time from first depression diagnosis to first MAOI prescription was 11.2years (IQR 4.3-21.1). From 2004 to 2013, MAO usage from 55 to 65 age group showed a steady fall from 72 to 28 patients. Median age of treated patients increased from 63 to 68years and 4-8% had concurrent SSRI prescriptions. Median prescription duration was 8.6 months (IQR 1.10) in each year, with per prescription ranges from 37 to 59 for CYP 227-278). Mean time on MAO from 2004-2013 was 1.7 years (IQR 0.4-4.8). CONCLUSIONS: THIN is a representative sample of 6% of the UK population. This study projects an estimated 660 UK patients start MAOIs yearly, with numbers decreasing. Estimated UK MAOI usage has fallen from 9,000 to 4,000 patients during 2004-2013. Records indicate that patients are receiving shorter, more frequent prescriptions. NICC guidelines confirm that MAOIs still have some role in depression management, although not defined. This is the first large study to assess changes in MAOI usage.

PM508
PATTERNS OF PSYCHOTROPIC PRESCRIPTION UTILIZATION AMONG DISABLED MEDICARE BENEFICIARIES UNDER 65

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OBJECTIVES: One-third of Medicare beneficiaries <65, who are deemed eligible for Social Security Disability Insurance (SSDI) due to disability, are diagnosed with mental health disorders. Access to psychiatric services research targeting this population is limited. This study estimated annual trends in and identified factors associated with psychotropic prescription utilization among disabled Medicare beneficiaries <65. METHODS: This national cross-sectional study used 2002-2009 Medicare Current Beneficiary Survey data. Nationally
cal therapies (e.g., motivational interviewing). The effectiveness of BH screening in PC settings is related to the availability of adequate treatment and follow-up systems of care. CONCLUSIONS: Increasing evidence is available concerning the effectiveness of BH-PH integration/collaboration strategies in treating depressive and anxiety symptoms and medical/clinical outcomes. Improved stratification of BH-PH intervention models will determine the relative success of different intervention approaches. Additional studies are needed in adolescents and people with schizophrenia and bipolar disorder.

PM506
BENZODIAZEPINE USE PATTERNS IN RESPONDENTS WITH DEPRESSION FROM THE CO-MORBIDITIES AND SYMPTOMS OF DEPRESSION (CODE) STUDY

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METHODS: Regression models predicting clandestine methamphetamine lab incidents using 2011 to 2012 county-level data for Kentucky, Illinois and Louisiana were calculated. Explanatory factors include PSE sales (in grams) in county population density, percent of adults with a high school diploma and percent population unemployed. Data sources include the National Precursor Load Exchange (NPLExa), the National Clandestine Laboratory Seizure report data received from the Department of Justice, Federal Bureau of Investigation Crime in the United States statistics and the Census Bureau American Community Survey. RESULTS: Results indicate a strong positive relationship between PSE sales and clandestine labs in counties with a more highly educated population. On average age have fewer labs while a rural population on average is associated with greater number of labs (p<0.05). Individually, sales of PSE are strongly correlated to lab numbers and children increasing trends, but not lab number. CONCLUSIONS: PSE sales have a little have a strong relationship to clandestine labs. Counties with greater sales of PSE have a greater number of clandestine labs, controlling for counties with no labs reported. These findings are an important addition to our previous work providing evidence for the potential between PSE sales and clandestine labs in multiple states over many years and have important policy implications as states struggle with policy options to reduce methamphetamine production in their communities.