negative symptoms. The results suggest that functioning and improvement in functioning are more strongly correlated with negative than with positive and other symptom factors.

PMH57

ASSOCIATION OF ANTIDEPRESSANT-RELATED WEIGHT GAIN WITH DEGREE OF ENJOYMENT AND SATISFACTION REGARDING GENERAL DAILY ACTIVITIES, MEDICATION AND OVERALL QUALITY OF LIFE

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OBJECTIVES: To examine the association of antidepressant-related weight gain with degree of enjoyment and satisfaction from general daily activities, medication and overall quality of life. **METHODS:** Employed individuals (≥18 years of age) with depression (excluding bipolar disorder) completed a web-based computer-generated 25-minute survey (population identified by Harris Interactive). Weight gain was measured using the Toronto Side Effects Scale which measures medication-related side effects in the two weeks preceding the survey, and analyzed as a 4-level ordinal variable (none, <=2lbs, <=4lbs, <=7lbs). Degree of enjoyment and satisfaction related to general activities, satisfaction with current medication, and overall quality of life were measured using a 5-point ordinal scale (1=very poor; 5=very good) employing the Quality of Life Enjoyment and Satisfaction Questionnaire – Short Form (QLESQ-SF). A summary "percent-of-max" score was calculated for general activity items, and transformed to a 5-level ordinal variable using cut-points of 20, 40, 60 and 80% (<20% represented least overall enjoyment/satisfaction) . Gender stratified cumulative logit models were used to estimate the effect of weight gain on QLESQ-SF measures. **RESULTS:** Of the 1,521 survey respondents, 872 (57%) reported current antidepressant use (60.6% female, mean age 49.9 ± 13.5 years). Compared to females with no weight gain, the odds of having lower enjoyment/satisfaction were greater for females who experienced any weight gain: <=2lbs (odds ratio [OR] =2.22; p=<0.0001), <=4lbs (OR=2.27; p=0.004) and <=7lbs (OR=12.50; p=<0.0001). Among males lower QLESQ score was associated only with the <=7lbs category (OR=5.26; p=0.0004). Satisfaction with medication was inversely associated with weight gain for females; <=2lbs (OR=1.49; p=0.051), <=4lbs (OR=2.33; p=0.002) and <=7lbs (OR=8.33; p=<0.0001) and males; <=7lbs (OR=2.78; p=0.031). **CONCLUSIONS:** These data suggest that antidepressant-related weight gain may have strong associations with patient perceptions of diminished enjoyment and satisfaction in general daily activities and with current medication, which may affect medication adherence.

PMH58

DONEPEZIL ORAL DISINTEGRATING VERSUS DONEPEZIL STANDARD TABLETS ON OBJECTIVE BURDEN OF CAREGIVERS OF NAÏVE PATIENTS WITH ALZHEIMER'S DISEASE

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OBJECTIVES: The goal of this research was to compare the effect of donepezil oral standard tablets (OST) versus donepezil oral disintegrating tablets (ODT) on stress and objective burden in caregivers of de novo patients with dementia of AD in routine medical practice. **METHODS:** A 6-month, prospective, observational study enrolled naïve patients with possible/probable AD according to DSM-IV/NINCDS-ADRDA criteria. Comparison on caregiver stress and objective burden was carried-out between donepezil formulations of OST and ODT for a 6 month period. The self-administered ZARIT scale and daily hours devoted to the care of patients on basic and instrumental activities of daily-living (BADL, IADL), behaviour supervision and nursing home institutionalization were computed. **RESULTS:** 547 naïve and de novo AD patients were analyzed: 123 (22.5%) received OST and 424 (77.5%) ODT, at 7.1 (2.5) and 7.1 (2.6) mg/day, respectively. No significant differences were observed in age, sex distribution, schooling, educational training, or relationship with main caregiver between groups. Baseline clinical characteristics (comorbidities, symptoms of dementia duration, MMSE scoring) were homogeneous between groups and remained unchanged during the study; Adjusted ZARIT scoring was reduced significantly in ODT group by -1.1 point (p=0.001) but this was not statistically higher than the reduction observed in OST cohort; -0.5 (p=0.527 between groups comparison). Daily hours of care on BADL and IADL were not statistically different between cohorts and remained unchanged during the study. Also, average number of hours/day on behaviour supervision or general supervision and the percentage of caregivers having to quit their jobs were similar. **CONCLUSIONS:** Findings of this study show that both subjective and objective burden of caregivers of de novo patients with AD treated with donepezil remain stables during the 6-month period of the study, and it is unrelated with type of formulation given to patients.

PMH59

EMPLOYMENT STATUS AND SELF REPORTED QUALITY OF LIFE IN CHINESE PATIENTS RECEIVING TREATMENT FOR MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: Patients with major depressive disorder (MDD) frequently report lower quality of life (QoL) and increased disability compared with the general population. This post hoc analysis describes the association between QoL, painful physical symptoms (PPS), depressive symptoms and employment status in a Chinese MDD patient cohort. **METHODS:** Chinese MDD patients (299) from a prospective observational study of six East Asian countries/regions were compared at baseline and after 3 months of naturalistic treatment on QoL (EuroQoL Questionnaire-5 Dimensions [EQ-5D] utility score), PPS (Somatic Symptom Inventory [SSI]), depression (17-item Hamilton Depression Rating Scale [HAMD17]) and employment status measures. Patients were classified as PPS positive or negative (PPS+, PPS-; SSI mean score ≥2 or< 2 respectively). Effect sizes (ES) were calculated using Cohen's d. **RESULTS:** Patients who were employed at baseline reported higher QoL (EQ-5D: 0.60 vs. 0.42; ES 0.7) and were less severely ill (HAMD17 total score: 22.7 vs. 26.0; ES -0.7) than those who were unemployed. Few transitions in employment status were observed during the study. Self-reported QoL was low (EQ-5D: mean 0.52) at baseline and improved substantially after 3 months (EQ-5D: 0.89). PPS+ patients were more severely ill (HAMD17: 25.4 vs. 23.3; ES 0.4) and had a lower QoL (EQ-5D: 0.41 vs. 0.58; ES -0.6) at baseline than PPS- patients. The higher illness severity (HAMD17: 7.0 vs. 4.6; ES 0.4) and lower QoL (EQ-5D: 0.83 vs. 0.92; ES -0.6) of PPS+ patients persisted after 3 months. **CONCLUSIONS:** Employed patients reported a higher QoL and a lower symptomatic burden than unemployed patients. Patients with a low QoL were more likely to be unemployed. The QoL of Chinese MDD patients improved over 3 months of naturalistic treatment. The presence of PPS was associated with higher illness severity and lower QoL at baseline and after 3 months.

PMH60

FACTORS ASSOCIATED WITH HEALTH-RELATED QUALITY OF LIFE IN ALCOHOL DEPENDENT PATIENTS

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OBJECTIVES: Health-related Quality of Life (HRQoL) has become both a target of intervention and a crucial outcome in evaluating treatment of alcohol dependence. Little has been studied on the factors associated with HRQoL before alcohol dependence treatment. We explored the association between HRQoL and several risk factors including level of alcohol consumption. **METHODS:** We used data from CONTROL, an observational cohort study on 143 alcohol dependent patients from Lausanne hospital, Switzerland, followed for 12 months. Average daily alcohol consumption was collected every month and categorised according to the World Health Organisation's risk levels (WRL) classification: high, medium, low or abstinent. Other measures were collected every three months: HRQoL (SF-36), Beck inventory depression score (BDI) and sociodemographic characteristics. The mean score for each dimension and for the Physical and Mental Component Summary Score (PCS and MCS) were calculated at baseline and at 12-months. Correlates of MCS and PCS were identified using Pearson correlation coefficients and factors associated with change from baseline to 12-months were identified using linear mixed models. **RESULTS:** At baseline, except for physical functioning, all average SF-36 scores were below those in the general population. The most impaired scores were those with the heavier contribution to MCS. MCS was significantly correlated with BDI, WRL and age. Compared to abstinent patients, difference in MCS scores was significantly lower in patients with medium (difference=-12.9; p<0.005) or high risk (difference=-14.8; p<0.0001) levels whereas no significant difference was observed between abstinent and low risk patients (difference=-7.3; N.S.). Change in MCS from baseline to 12-months was associated with BDI and WRL. No significant association was found with PCS. **CONCLUSIONS:** HRQol is significantly in alcohol-dependent patients. The level of alcohol consumption and depression appeared as important drivers of HRQoL related to mental health.

PMH61

A DESCRIPTIVE ANALYSIS OF ATOMOXETINE UTILIZATION IN ATTENTION DEFICIT/HYPERACTIVITY DISORDER (ADHD) THE UNITED KINGDOM AND ITALY

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OBJECTIVES: To describe treatment characteristics among children with Attention Deficit/Hyperactivity Disorder (ADHD) using atomoxetine in two European countries. **METHODS:** Medical charts of patients aged 6-17 with ≥1 diagnosis of ADHD between 1/2004-6/2007 were reviewed by physicians from 6 European countries. All patients had ≥2 years of follow-up data and received pharmacological or behavioral therapy post-diagnosis, and were not enrolled in a clinical trial. This analysis focused on two countries with the largest samples of Strattera® (atomoxetine HCL) users: UK (UK) and Italy (IT). Outcomes presented include descriptive statistics (means, rates, percentages) describing treatment: patterns, response and satisfaction. **RESULTS:** 94 patients met inclusion criteria (UK [n=51], IT [n=43]). Patients were predominantly male 80.4% (UK) and 76.7% (IT), Caucasian, 88.2% and 95.3% and mean (SD) age at diagnosis was 9.5(2.6) and 9.0(2.9). Most patients were diagnosed via the Connors (76.5%) (UK) or DSM-IV (51.1%; IT) criteria. A majority of patients presented as combined type ADHD (hyperactive/impulsive and inattentive symptoms) (UK >74% and IT >62%). Between 63% to 76% of all patients indicated ≥8 impairment for impulsivity and hyperactivity (scale from 0 "no impairment" to 10 "high level impairment"). 76.5% (UK) and 55.8% (IT) of patients received two or more ADHD treatments and 42.1% and 20.5% received a methylphenidate product; 37.3% and 32.6% of physicians in the UK and IT, respectively, indicated that these patients had a "poor" or "very poor" response to methylphenidate. 64.9% of patients were currently prescribed atomoxetine vs. 35.1% previously prescribed. 23.0% of physicians of current patients indicated that they were "neither satisfied nor dissatisfied," "moderately dissatisfied," or "very dissatisfied" with current ato-

moxetine treatment. **CONCLUSIONS:** At baseline, country-level variations in some patient characteristics were evident in children with ADHD treated with atomoxetine in the UK and IT. Further, this study suggests an opportunity for improved ADHD treatment response and satisfaction outcomes.

PMH62

AN EXAMINATION OF THE ASSOCIATION BETWEEN ANTIDEPRESSANT-RELATED WEIGHT GAIN AND VARIOUS ASPECTS OF WORKER PRODUCTIVITY

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OBJECTIVES: To understand the association of antidepressant-related weight gain with various aspects of worker productivity. **METHODS:** Employed individuals (≥18 years of age) with diagnosed depression (excluding bipolar disorder) completed a web-based computer-generated 25-minute survey (study population identified by Harris Interactive). Weight gain was measured using the Toronto Side Effects Scale which measures medication-related side effects in the 2-weeks preceding the survey, and was analyzed as a 4-level ordinal variable (none, <=2lbs, <=4lbs, and <=7lbs), where "none" was the referent category. The Work Productivity and Activity Impairment (WPAI) questionnaire was used to assess percent of impaired productivity (overall, absenteeism, presenteeism, activity impairment) during the 2-weeks preceding the survey, with higher numbers indicating greater impairment and less productivity (i.e., worse outcomes). Using distribution among current antidepressant users, each WPAI measure was categorized into quintiles, with the lowest and highest representing least and greatest impairment, respectively. Cumulative logit models were used to estimate the overall effect of weight gain on WPAI measures as well as across gender. **RESULTS:** Of the 1521 survey respondents, 872 (57%) reported current antidepressant use (60.6% female, mean age 49.9 ± 13.5 years). Weight gain was associated with loss of productivity: <=2lbs (odds ratio [OR]= 1.54; p=0.005), <=4lbs (OR= 2.14 ; p=0.0007) and <=7lbs (OR= 2.96; p= 0.0009). In females, using "no weight gain" as a reference group, the odds of being in a worse overall productivity category increased with the increase of weight gain: <=2lbs (odds ratio [OR]=1.59; p=0.02), <=4lbs (OR=2.17; p=0.005) and <=7lbs (OR=3.13; p=0.01). Similar trends were observed in males: <=2lbs (OR=1.43; p=0.15), <=4lbs (OR=2.00; p=0.06) and <=7lbs (OR=2.86; p=0.02). **CONCLUSIONS:** In employees with depression, antidepressant-related weight gain was associated with loss in overall productivity. Additional research to quantify the indirect costs of antidepressant-related weight gain in terms of productivity losses may be useful.

Mental Health – Health Care Use & Policy Studies

PMH63

STAY HEALTHY THROUGH GAME-CARE THERAPEUTICS: IT'S TIME TO PLAY THE GAME!

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OBJECTIVES: Health care research in present scenario is a platform wherein a range of interventions play their role to alleviate suffering and mitigate the course of diseases. Gaming console have so far demonstrated promising and considerable potential as rehabilitation and lifestyle treatments. The objective of this review was to study the advent and role of new generation gaming consoles (e.g. Nintendo Wii, Xbox, and PS3) in healthcare research in a systematic manner. **METHODS:** A consolidated search strategy was developed and run in EMBASE, MEDLINE, Cochrane, POPLINE, SCOPUS, and Clinicaltrials.gov databases to identify the trials utilising gaming consoles as principal intervention or supportive treatment in various disease areas. Grey literature was also identified though Google Scholar. Data extraction was performed and results were summarized. **RESULTS:** The data revealed that motion sensor and interactive gaming consoles have found their role in multiple health care fields ranging from rehabilitation, weight loss, stroke recovery, improvement in locomotor activity, Parkinson's disease, Alzheimer's disease, and back pain, etc. Also, their active presence in promoting exercise, health care coaching and monitoring, and health awareness programs has seen a marked increase due to new and innovative applications being identified every day. **CONCLUSIONS:** Newer health care technologies and platforms like gaming consoles help in numerous disease area to improve patient outcomes. Their transformation, propagation, and implementation as tools of healthcare services is a valuable strategy that the health care organizations should consider taking into consideration the emerging field of gaming technology in parallel with health technology. Detailed analysis, data tables, and graphs describing the study results will be presented.

PMH64

DIABETIC CARE AND RISK OF ACUTE COMPLICATIONS OF TYPE II DIABETICS WITH SCHIZOPHRENIA: A THREE-YEAR FOLLOW-UP OF HYPOGLYCEMIC THERAPY

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OBJECTIVES: Individuals with schizophrenia are found to receive poorer medical care, and have a higher prevalence of diabetes than general population. Once a hypoglycemic therapy is needed, proper compliance to the therapy and diabetic care are important for achieving good glycemic control as well as preventing acute complications. Therefore, this study aimed to compare diabetic care and risk of acute complications after the initiation of the therapy for three years, between type II diabetics with schizophrenia versus those without schizophrenia. **METHODS:** This study used the claims database of the National Health Insurance program. Enrollees who began oral hypoglycemic therapy in 2001, and had been diagnosed with schizophrenia and refilled at least one prescription of antipsychotic(s) in the year prior to the index date were included in the study (the case group). Enrollees without schizophrenia who began oral hypoglycemic therapy in 2001 were selected from a randomly selected sample of the enrollees to match the age and gender of the case group (1:1) (the comparison group). Indicators of diabetic care included good medication compliance (a medication possession ratio≥0.8), blood glucose test, and HbA1c test. Indicators were measured annually. Acute complications were defined as emergency room visits or hospital admissions due to coma, hypoglycemia, hyperglycemia, or diabetic ketoacidosis. Cox proportional hazards model was adopted to assess risk of acute complications. **RESULTS:** There were 544 subjects in the case group and comparison group, respectively. The percentage of subjects compliant to the therapy in the case group was decreasing. In addition, the case group had poorer blood glucose-related monitoring in the long run, and had a higher risk of acute complications than the comparison group. **CONCLUSIONS:** Diabetics with schizophrenia, compared with those without such a condition, had worse diabetic care. Better disease management will be necessary for this patient group.

PMH65

THE CHALLENGE OF ADHERENCE AND INDIVIDUALIZED TREATMENT IN SEVERE MENTAL DISORDERS – A NORDIC PERSPECTIVE

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OBJECTIVES: Drug choice and adherence are important aspects in schizophrenia and bipolar disorder (BD) and depend on patient and drug characteristics. Our aim was to examine Nordic psychiatrists' views on treatment choice, adherence, once daily dosing (ODD), and the use of extended release (XR) and instant release (IR) quetiapine. **METHODS:** We conducted a quantitative, telephone-based survey with 201 respondents randomly selected from a list of all 1906 Swedish and 677 Danish psychiatrists (excluding child and geriatric psychiatrists). Structured, one-hour qualitative interviews with 10 psychiatrists per country allowed us to further interpret the results. Data was collected by an independent research company. For binary variables, we performed a binomial test of the null hypothesis that the alternative responses were equally likely. **RESULTS:** One hundred one Danish and 100 Swedish psychiatrists were included; 65% were male and the mean (SD) psychiatric experience was 15.4 (8.2) years. No relevant country differences were found. 198 psychiatrists (99%) agreed on the importance of individualized treatment (p≤0.0001). Respondents reported that 42% of schizophrenia and 33% of BD patients tried ≥3 antipsychotics before being stabilized. All respondents reported non-adherence to be common and all associated non-adherence with side-effects. 199 (99%) psychiatrists thought that ODD would improve adherence (p≤0.0001), and 196 (98%) that it could mitigate partial adherence problems (p≤0.0001). 179 respondents (89%) said that ODD reduces relapse rates (p≤0.0001). A total of 147 psychiatrists (73%) associated quetiapine XR with less day sedation than IR (p≤0.0001), and 132 (66%) associated XR with a reduced need for injection treatment (p≤0.0001). In the qualitative interviews, XR was to a higher extent associated with antipsychotic monotherapy and IR more often with short-term use for e.g., sedation. **CONCLUSIONS:** Nordic psychiatrists considered individualized drug therapies in schizophrenia and BD to be important and perceived ODD to improve adherence. Respondents associated quetiapine XR with differential use compared to IR.

PMH66

12-YEAR TREND ANALYSIS ON THE CHARACTERISTICS, PRIMARY PAYER, AND PRESCRIBED MEDICATIONS OF PHYSICIAN-OFFICE VISITS FOR PATIENTS WITH DEMENTIA IN THE UNITED STATES

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OBJECTIVES: This study was to estimate the national trend of physician-office visits for patients with Alzheimer's disease and senile dementia (AD+SD), related characteristics, primary payment source, and prescribed medications over a period of 12 years (1998 – 2009) in the United States. **METHODS:** Physician-office visits with AD+SD diagnosis were identified in the National Ambulatory Medical Care Survey, stratified by time frame, to perform a trend analysis for patients aged 40+ with relevant ICD-9-CM codes (290.xx, 294.xx, 331.xx). Main outcomes of interest are the changes in AD+SD physician-office visits, primary payer source, and prescribed medications. A series of multivariate regressions (generalized linear model [GLM] with Poisson distribution) for number of medications prescribed per visit were employed by year to estimate the increased medication numbers associated with AD+SD, controlling for patient demographics, comorbidities, and visit/payment characteristics. The impact of explanatory variables at both physician-office and visit level was also assessed through hierarchical modeling. **RESULTS:** Over the 12-year period, the annual AD+SD visits and average all-purpose medications prescribed per AD+SD visit have yearly growth rates of 18.2% and 10.7%, respectively. Medicare has consistently been the largest primary payer for AD+SD physician-office visits (from 67% of visits in 1998 to 77% in 2009). Private payer and Medicaid also have increased shares (from 6% to 13% and from 4% to 5%, respectively) as primary payer, while fewer visit portions are primarily covered by Self-pay and Other sources. Numbers of drug mentions per visit attributable to AD+SD, estimated through GLM regressions, are 0.64 in 1998, 1.92 in 2004, and 2.20 in 2009. **CONCLUSIONS:** AD+SD patients' use of physician-office services has increased