

problems with cognitive functions and problems with emotional dysregulation. ADHD was seen to impact everyday activities, social interactions and emotional functioning. These impacts had implications for the achievements at school; self-esteem and indulgence in risky behavior. Variables that moderate these impacts were also identified. The interrelationships among variables will be presented. The model was used to inform a strategy to evaluate outcomes of pharmacological treatments in adolescents with ADHD. The plausibility of the model was confirmed based on discussions with clinicians and drug development experts. **CONCLUSIONS:** An ADHD disease conceptual model was developed based on information from literature and stakeholders interviews, to describe ADHD in adolescents. It will be used to develop a strategy for PRO development in adolescent ADHD and identify new outcomes.

PMH54

ADHD AMONG ADULTS IN EUROPE AND THE UNITED STATES: SOCIO-DEMOGRAPHICS, COMORBIDITIES, HEALTH CARE RESOURCE USE AND WORK PRODUCTIVITY

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OBJECTIVES: To compare socio-demographic characteristics, comorbidities, health care resource use and work productivity assessments among adults diagnosed with attention-deficit/hyperactivity disorder (ADHD) from Europe (E) and the United States (US). **METHODS:** Data are from the 2011 National Health and Wellness Survey (NHWS), conducted online annually by Kantar Health among samples of adults obtained from international consumer panels. Data reported in this study were gathered September-December 2011 in Germany, UK, France, Spain, Italy, and the U.S. Comparisons of ADHD and non-ADHD control populations were presented previously. Those results are extended below, by comparing to differences between European and U.S. study participants, using chi-square tests of proportions. **RESULTS:** A total of 235 European and 676 US NHWS participants reported having received a diagnosis for ADHD from a health care professional. Diagnosed ADHD respondents were more frequently male (59% E vs. 56% US) and less likely married (38% E vs. 33% US) than non-ADHD controls. ADHD respondents were more likely to report sleep difficulties (67% E vs. 44% US; $p<0.05$), anxiety (61% E vs. 58% US), depression (59% E vs. 60% US), or headaches (57% E vs. 63% US) than non-ADHD controls. Likelihoods of an emergency room visit (34% E vs. 24% US; $p<0.05$), or a hospitalization (32% E vs. 12% US; $p<0.05$) within the past 6 months were greater among diagnosed ADHD respondents than non-ADHD controls. Diagnosed ADHD respondents were also more likely to report health-related work productivity loss (55% E vs. 34% US; $p<0.05$). **CONCLUSIONS:** Adults from Europe and the US reported high rates of comorbidity with various mental, emotional, or physical disorders, high rates of health resource utilization, and high rates of health-related work productivity loss, with many of these higher among European than US participants.

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THE EFFECT OF VORTIOXETINE (LU AA21004) ON HEALTH-RELATED QUALITY OF LIFE (HRQOL) IN PATIENTS WITH MAJOR DEPRESSIVE DISORDER (MDD)

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OBJECTIVES: Depression has a significant detrimental effect on HRQoL and functioning. The aim of this study was to assess HRQoL outcomes in randomized placebo-controlled studies of adult MDD patients receiving vortioxetine. **METHODS:** Effects on HRQoL and functioning were evaluated in adult MDD patients using the Short-Form 36 (SF-36), the Quality of Life Enjoyment and Satisfaction Scale-Short Form (Q-LES-Q-SF), the EuroQoL Five-Dimension (EQ-5D), the Health Status Questionnaire (HSQ-12) and the Sheehan Disability Scale (SDS). Furthermore, HRQoL and functioning were assessed in a short-term study in elderly MDD patients (≥ 65 years). A random effects meta-analysis was performed on the short-term vortioxetine studies ($n=4$ for SF-36 and $n=7$ for SDS). Values are presented as change from baseline versus placebo. **RESULTS:** Adult patients were treated with placebo ($n=1316$) or vortioxetine ($n=2155$). The meta-analysis (FAS, MMRM) showed a statistically significant difference to placebo in favour of vortioxetine in the SF-36 Mental Component Summary (MCS) score (5mg: 2.6, $p=0.001$, $n=604$; 20mg: 4.8, $p<0.001$, $n=328$) and 4 domain scores (vitality, social functioning, role-emotional, and mental health). Standardised effect sizes showed the clinical relevance of these results. Improvement was significantly different from placebo in the EQ-5D Health State score for vortioxetine 10mg (7.5 points, $p<0.05$, $n=86$) (FAS, MMRM) and the Q-LES-Q total score for vortioxetine 15mg (3.3 points, $p<0.01$, $n=127$) and 20mg (4.5 points, $p<0.0001$, $n=134$) (FAS, LOCF). Improvement in functioning, measured with the SDS, was in favour of vortioxetine 10mg (-1.7, $p=0.004$, $n=269$) and 20mg (-2.4, $p=0.006$, $n=234$) (FAS, MMRM). In the elderly study, improvement in the HSQ-12 for vortioxetine 5mg ($n=136$) was significantly different from placebo ($n=128$) for Health Perception (10.4, $p<0.0001$), Mental Health (7.9, $p<0.001$), and Energy (6.4, $p<0.05$) domains (FAS, MMRM). **CONCLUSIONS:** Vortioxetine showed significant and meaningful improvements in HRQoL and functioning versus placebo across several MDD trials and relevant outcome instruments.

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GLOBAL TREATMENT SATISFACTION: PRESENTATION OF A LATENT VARIABLE APPROXIMATING MODEL

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OBJECTIVES: This research presents an approximating model of global treatment satisfaction (GS) created using econometric techniques. GS questions are usually worded, "All things considered, how satisfied are you with the care you received...?" The economic interpretation of GS is higher satisfaction corresponds to higher utility. When thought of as utility, GS is tied to the assumptions of utility maximizing imbedded in consumer theory, and more specifically, to the concept of demand. Attempts in the literature to measure GS fall short because of lack of theoretical guidance and inconsistency in measurement and variable operationalization. We avoid these limitations by presenting a methodological approach that makes it possible to view GS from an economic perspective. **METHODS:** The model is based on data from an outcomes study of substance abuse treatment services; however, it can be used for any treatment population. The participants are 311 adults (average age 36.4) discharged from primary treatment (ASAM Level 1A) in 2006-2010. The model is based on a single ordinal five-item GS variable and two treatment-relevant covariates: post-treatment time abstinent from use (treatment outcome), and an adjustor variable indicating addiction severity. GS is treated as a latent variable. It is specified using ordered probit regression under the log-linear functional form. The structural part of the relation is isolated by setting the model error term to zero. **RESULTS:** The model estimate for the outcome variable is 0.205 (S.E. 0.041; $X^2<0.0001$), and for the severity variable 0.722 (S.E. 0.431; χ^2 N.S.). A set of GS indifference curves are presented based on severity and outcome equivalencies. **CONCLUSIONS:** The effort necessary to obtain higher GS increases on the margin. This is important given the strong relationship between addiction severity and treatment cost and given treatment resource constraints. This technique can be incorporated into the quality assurance activities in any health care setting.

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FACTORS INFLUENCING PHYSICIANS' PRESCRIBING BEHAVIOR ASSOCIATED WITH PRESCRIBING POLY-PHARMACY ANTIDEPRESSANT DRUGS

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OBJECTIVES: Prescribing of more than one antidepressant drug (poly-pharmacy) is not clinically substantiated in literature and such a practice could contribute to additional side-effects. Antidepressant drugs are prescribed to patients diagnosed with psychiatric and non-psychiatric medical conditions. The objective of this study was to determine the patient demographics, non-demographic factors and physician characteristics associated with prescribing poly-pharmacy antidepressants in both psychiatric and non-psychiatric cases. **METHODS:** The 2000-2009 National Ambulatory Medical Care Survey database was accessed for medical records of patients who were prescribed the antidepressant drugs. The medical records were sorted into psychiatric and non-psychiatric categories. A logistic regression analysis helped determine the patient demographic, non-demographic and physician characteristics associated with prescribing poly-pharmacy antidepressant drugs. **RESULTS:** For patients diagnosed with psychiatric illnesses: Patient demographic factors of age ($p<0.0001$), gender ($p=0.0087$), race/ethnicity ($p=0.0091$), method of payment ($p=0.0283$), non-demographic factors of diagnosis ($p<0.0001$), and number of medical condition diagnosed ($p<0.0001$, OR=1.259, CI=1.125-1.408) were significantly associated with prescribing poly-pharmacy antidepressant drugs. Among the physician related factors, physician specialty ($p<0.0001$) and the region of practice (South) ($p=0.0475$) were significantly associated with prescribing poly-pharmacy antidepressant drugs. For patients diagnosed with non-psychiatric illnesses: Patients' age ($p<0.0001$), method of payment ($p=0.0444$), and among the non-demographic characteristics, the number of medical conditions diagnosed ($p=0.0246$, OR=1.16, CI=1.019-1.320), and patients diagnosed with circulatory system disease ($p=0.0111$) were significantly associated with the practice of poly-pharmacy. Of the physician related factors physicians classified as owners of non-solo practice ($p=0.0306$) were significantly associated with prescribing poly-pharmacy antidepressant drugs. **CONCLUSIONS:** The fact that more than 40% of poly-pharmacy antidepressant drugs was prescribed to patients diagnosed with non-psychiatric illnesses, and the significant association between the poly-pharmacy antidepressants prescribed and the number of medical conditions diagnosed in both psychiatric and non-psychiatric patients lends to further investigation as to the reasonableness of such practices.

PMH58

ATYPICAL ANTIPSYCHOTICS FOR SCHIZOPHRENIA IN BRAZIL: A DESCRIPTIVE ANALYSIS OF ACQUISITION COSTS

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OBJECTIVES: Several medicines are available in the Brazilian public health system (SUS) to treat schizophrenia. The Ministry of Health (MoH) and Brazilian states share the responsibility of acquiring the atypical antipsychotics, which have significant impact on the public budget. Here, we present the profile of financial resources allocated in the acquisition of atypical antipsychotics in the SUS. **METHODS:** Descriptive analysis of expenses with drugs, based on the amount dispensed and acquisition prices in 2011. Data were obtained from MoH databases. For quetiapine, olanzapine, risperidone and ziprasidone, we assumed the financial resources applied by both states and MoH; for clozapine, we needed to account only the MoH resources (current values of 2011; exchange rate: US\$1 = R\$2.04). **RESULTS:** In 2011, expenses with atypical antipsychotics (clozapine, quetiapine, olanzapine, risperidone, and ziprasidone) for