(QALY) gained **RESULTS:** The average PP-LAI patient in the base case with or without SoC experienced 0.840 QALYs while the SoC patient experienced 0.812 QALY. Since the PP-LAI plus SoC group cost more than the PP-LAI monotherapy without additional QALY gains, PP-LAI plus SoC was discarded from further analysis. PP-LAI monotherapy resulted in incremental cost savings of AED 831 (USD 226) when compared to SoC. PP-LAI monotherapy is therefore projected to be an economically dominant treatment option. Dominance drivers were greater remission days and lower hospitalization and ER visits for PP-LAI vs SoC. The model was sensitive to a wide range of published SoC adherence rates. In scenario analyses, the conclusions were between increased economic dominance and highly cost-effective when PP-LAI monotherapy was compared to SoC. **CONCLUSIONS:** PP-LAI is projected to save costs and improve patient outcomes in the UAE and should be considered a viable treatment alternative by payers and prescribers alike.

PMH36

A SYSTEMATIC REVIEW OF HEALTH ECONOMIC STUDIES ON BIPOLAR DISORDER TYPE I IN THE UNITED STATES

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OBJECTIVES: Bipolar disorder (BD) is a chronic disease associated with several medical and psychiatric comorbidities that can have serious economic impact. We aimed to identify, describe and critically assess health economic studies in BD-I in the US during the last ten years and provide recommendations for future researchers. **METHODS:** We searched MEDLINE, EMBASE, NHS EED and ISPOR's database to identify articles/posters with economic evaluations (cost-effectiveness-CEA, cost-utility-CUA, cost-minimization-CMA, cost-benefit-CBA and budget impact analysis-BIA) performed on BD-I patients. We collected information on: population, intervention/comparator, setting, modeling, data quality, clinical/economic outcomes and uncertainty analysis. For quality assessment, two checklists (Drummond/Philips) recommended by the Cochrane Collaboration were applied. **RESULTS:** Six studies were included (4 articles, 1 poster, 1 budget impact model-BIM) covering various medications alone or combined (lamotrigine, lithium, olanzapine, quetiapine, aripiprazole, lurasidone and risperidone) in several disease settings (overall maintenance, maintenance after stabilization or with recent manic episodes, acute depression or hospitalization following acute mania). Regarding study types (type of modeling) we found 4 CEA/CUA (Markov model), 1 CEA (decision tree) and 1 BIA (discrete event simulation). Measures of benefit included: number of acute episodes, euthymic days, QALY, remission rate and utilities. Four CEAs used ICER as economic outcome and one used Net Benefit Analysis (NBA). Quality assessment showed medium-to-high risk of bias, and very weak clinical bases supporting analyses. **CONCLUSIONS:** Further economic studies on BD-I should take into consideration the main comparators used in real-life. When no head-to-head comparison exists, researchers should perform systematic review and possibly network meta-analysis. Since BD-I is a chronic disease, a lifetime framework should be considered for time horizon. Parameters from previous publications should be used carefully, since many of them may be invalid. Economic analyses could be developed further to include other treatment options and Markov model should cover subsequent treatment lines.

PMH37

THE ECONOMIC BURDEN OF OPIOID USE DISORDER (OUD): RESULTS OF A STRUCTURED LITERATURE REVIEW

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OBJECTIVES: Opioid use disorder (OUD) is a chronic and relapsing medical illness associated with a high cost to individuals, families and society. We evaluated the current literature to identify evidence gaps and summarise published data on economic costs associated with OUD. **METHODS:** A structured, comprehensive literature review was conducted to identify articles describing the burden and treatment landscape of OUD including: risk factors, patient characteristics and comorbidities, epidemiology, humanistic and economic burden, employment and crime, treatment options and current clinical guidelines. Global literature databases, guideline databases, regulatory and health technology assessment agency websites and relevant society guidelines were searched for data published between 2000–2015. Articles were not restricted by language. Eligible articles were those reporting on OUD (including opioid dependence and abuse) and providing data on $\geq$1 topic of interest. **RESULTS:** A total of 2,234 records were screened; 202 articles met the selection criteria and were included in this literature review, 31 of which reported on economic burden. From these 31 articles, only one reported total economic burden associated with untreated opioid dependence as CAD$5,086 million/year (cost year: 1996). The remaining articles (Australia [7], UK [1], Canada [2], US [20]) focused on specific elements of economic burden, including costs of treatment programmes, criminal justice and use of prescription opioids. Of these, studies looking specifically at prescription opioid abuse, dependence and misuse, reported that the total societal cost was US$55.7 billion (2007) and US$78.5 billion (2013). **CONCLUSIONS:** The literature reports a substantial economic burden associated with OUD. However, the majority of the evidence is from studies reporting on specific elements of cost, with limited direct and indirect cost data. Furthermore, the latest comprehensive data were reported approximately 20 years ago. Thus, the lack of recent global data is likely to result in underestimation of the current economic burden associated with OUD.

MENTAL HEALTH – Patient-Reported Outcomes & Patient Preference Studies

PMH38

TREATMENT PATTERNS, ADHERENCE AND CLINICAL OUTCOMES IN BIPOLAR DISORDER TYPE I: A SYSTEMATIC REVIEW OF OBSERVATIONAL STUDIES

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OBJECTIVES: To perform a systematic review of literature on real-world data from observational studies on bipolar disorder (BD) treatment regarding patterns-of-care, adherence, and clinical outcomes of second-generation atypical antipsychotics (SGA). **METHODS:** A literature search was performed on Medline and Embase to identify articles on BD addressing patterns-of-care, adherence and clinical outcomes of SGA therapy from 2006 to 2016. **RESULTS:** Fifty-three studies were included for analysis. Regarding patterns of drug utilization, SGA monotherapy are prescribed for about 45% of patients as first antimanic therapy (quetiapine in 39.5% and aripiprazole in 37.2% of cases). Overall, prescriptions for BD patients include mainly SGA monotherapy or in combination (45-50%) and mood stabilizers (e.g.: lithium, anticonvulsants) for 65-80% of cases. During follow-up, combination therapy (SGA+mood stabilizers) is prescribed to 50-70% of patients. Adherence to clinical guidelines prescription recommendations range from 50%-83%. Adherence to medication was measured by medication possession ratio (MPR), with an MPR $\geq$80% considered as appropriate adherence to therapy. Some studies reported very poor adherence rates (MPR: 15-25% and MPR $\geq$80% for only 6-10% of patients receiving SGA), but the majority reported MPRs ranging from 40-75%. Mean duration of SGA use was 175 to 290 days over a 12-month period, but persistence was described as around 100 days. Reasons for non-adherence were: younger age; baseline substance use disorder; higher disease burden, with a greater number symptoms; side effects as a cause for frustration; comorbid anxiety and obsessive-compulsive disorder. **CONCLUSIONS:** Observations from real-world evidence are essential components in economic models development and decision-making process. This review showed which patterns-of-care are adopted in real practice for the treatment of BD patients. SGA monotherapy is used for 45% of patients during first antimanic episode, almost 50% of cases receive SGA (monotherapy or combination) overall and up to 70% are treated with SGA plus mood stabilizers during follow-up.

PMH39

EVALUATION OF DEPRESSION PREVALENCE AND ASSOCIATED DEMOGRAPHIC RISK FACTORS AMONG STUDENTS OF A PUBLIC SECTOR UNIVERSITY: A CROSS-SECTIONAL STUDY

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OBJECTIVES: To obtain the prevalence of depression and whether the socio-demographic variables were associated with depression in professional university students. **METHODS:** A cross-sectional study was carried out on students of ages between 18-25 years in faculty of pharmacy and alternative medicine in The Islamia University of Bahawalpur, Pakistan. Data was collected by self- administered questionnaire on socio-demographic variables. Depression was evaluated by Beck depression inventory (BDI). BDI scores of 17 or more than 17 are considered depressive. SPSS version 20.0 was used for data analysis. Mann-Whitney U test and Kruskal-Wallis analysis of variance were applied for continuous data analysis. **RESULTS:** Out of all respondents, 40% students suffered from depression and had BDI scores of 17 or above of it. The prevalence of depression among 2nd year students is 43.2%, 52.3% in students with poor study performance, 56.2% in students residing in urban areas, 50% in students of 20 years older or less, and 68.2% in students with poor socio-economic status. Depression was significantly associated with poor socio-economic status, study year and study performance showing p value $>$ 0.001 for all variables while depression levels were insignificantly high among females and urban residents showing p values 0.479 and 0.193 respectively. **CONCLUSIONS:** Professional Students of a public sector university of Pakistan have high prevalence of depression. Considering high prevalence of depression among university students, a student counseling service should be arranged to help the students with poor study performance and poor financial back ground.

PMH40

INCORPORATING PATIENT PERCEPTIONS ABOUT TREATMENT IN COST-EFFECTIVENESS ANALYSIS

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OBJECTIVES: ACUDep, a randomized pragmatic trial, compared acupuncture, counselling, and usual care for relieving depression. Patient perceptions about the effectiveness of treatments may affect costs and health outcomes through compliance or a placebo effect. The objective of this study was to assess the cost-effectiveness for patient subgroups with different perceptions about treatment effect. **METHODS:** ACUDep reported outcomes on costs and EQ-5D for up to 12 months for 755 patients. Patient perceptions about the effectiveness of each treatment was measured on a five-level likert scale. A binary variable was generated indicating if a patient had a positive opinion about the treatment, i.e. they thought the treatment would be fairly effective or very effective. A seemingly unrelated regression was used to estimate costs and QALYs with coefficients for treatment received, positive perception of each treatment and an interaction term between all coefficients. **RESULTS:** Most patients did not have a positive perception of any of the treatments, 31.3% responded very ineffective, fairly ineffective or can't decide for their perception of effectiveness of all treatments. 5.7% of patients had a positive perception of all treatments. Using a threshold of £20,000