

from a common Normal distribution of treatment effects with an overall SSRI class effect mean, and between treatment within class heterogeneity. **RESULTS:** There were 55 eligible studies identified in the systematic review. The intervention with the greatest decrease in YBOCS was behavioural therapy ("exposure and response prevention") showing a decrease of 13.86 (CrI 9.34 to 18.31). The second and third greatest decrease was cognitive therapy (12.80 CrI 7.39 to 18.18) and behavioural therapy plus clomipramine (12.47 CrI 5.80 to 19.08) respectively. The SSRI class effect showed a relative decrease in mean YBOCS of 2.89 (CrI 1.05 to 4.71) compared to pharmacological placebo. The results of the individual SSRIs ranged from a decrease of 2.49 (sertraline) to 3.10 (fluvoxamine). **CONCLUSIONS:** This analysis showed a combination of behavioural therapy plus clomipramine has the greatest decrease in YBOCS. There is little evidence to show a difference between SSRIs.

#### PMH9

##### SYSTEMATIC REVIEW AND MIXED TREATMENT COMPARISON OF LITHIUM OR AN ATYPICAL ANTI-PSYCHOTIC (AAP) USED TO AUGMENT A SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRI) IN TREATMENT RESISTANT DEPRESSION (TRD)

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**OBJECTIVES:** To estimate the clinical effectiveness of augmentation of SSRI antidepressant therapy with either lithium or an AAP in TRD, defined as failure to respond to two or more antidepressants in the current episode of depression. **METHODS:** Systematic review of CENTRAL, EMBASE, MEDLINE, and PsycINFO was completed in August 2011. Additional data were obtained from manufacturers. Studies were assessed for quality using the Cochrane Risk of Bias Tool. Pairwise meta-analysis and mixed treatment comparison (MTC) were undertaken based on intention-to-treat analyses. **RESULTS:** Of the 3,721 papers found in the literature search, 12 randomised controlled trials (RCTs) were identified; 10 (SSRI + AAP vs SSRI + placebo/no treatment); 1 (SSRI + AAP vs SSRI + lithium); 1 (SSRI + lithium vs SSRI + placebo). The RCTs included in the primary analyses used fluoxetine as the SSRI and olanzapine as the AAP. Results of the MTC showed a non-significant trend in favour of lithium augmentation for response [lithium odds ratio (OR) 1.29; 95% credible interval (95% CrI): 0.11 to 5.32], mean change in Montgomery-Åsberg Depression Rating Scale (MADRS) score from baseline (mean difference -1.47; 95% CrI: -9.10 to 6.41) and all-cause withdrawals (OR 0.74; 95% CrI: 0.10 to 2.66). **CONCLUSIONS:** In patients with TRD, there is a lack of direct evidence comparing the clinical effectiveness of augmenting an SSRI with an AAP compared with augmenting with lithium. Augmentation of SSRIs with lithium or AAP is likely to be beneficial in people with TRD. The limited evidence indicates no statistically significant difference between the two augmentation strategies.

#### PMH10

##### RELATIONSHIP OF INSIGHT WITH MEDICATION ADHERENCE AND THE IMPACT ON OUTCOMES IN PATIENTS WITH SCHIZOPHRENIA AND BIPOLAR DISORDER: RESULTS FROM A 1-YEAR EUROPEAN OUTPATIENT OBSERVATIONAL STUDY

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**OBJECTIVES:** Many patients with schizophrenia and bipolar disorder have impaired insight and low medication adherence. The aim of this post-hoc analysis is to explore the relationship between insight and medication adherence and their impact on the outcomes of patients with schizophrenia or bipolar disorder. **METHODS:** We included 903 patients with schizophrenia or bipolar disorder who participated in an observational study conducted in Europe on the outcomes of patients treated with two oral formulations of olanzapine over a 1-year period. Evaluations included Clinical Global Impression (CGI), Global Assessment of Functioning (GAF), insight (Scale to Assess Unawareness of Mental Disorder, SUMD), non-adherence (Medication Adherence Rating Scale, MARS), and therapeutic alliance (Working Alliance Inventory, WAI). Correlations between variables were assessed by Spearman Correlation Coefficient (SCC). A path analysis was used to understand the relationship between insight, adherence, therapeutic alliance and outcomes. **RESULTS:** 67.8% of patients had schizophrenia. GAF score was higher in bipolar vs schizophrenia patients (mean (SD) 58.4 (15.6) vs 51.9 (15.7),  $p < 0.001$ ). Medication adherence was also higher in bipolar patients (mean MARS score (SD) 6.5 (2.8) vs 5.8 (2.7),  $p < 0.001$ ). Patients with schizophrenia had lower insight (i.e. SUMD item 1, unawareness of mental disorder, mean (SD) of 2.5 (1.3) in schizophrenia vs 1.9 (1.2) in bipolar,  $p < 0.001$ ). Better insight was associated with higher adherence (SCC, ranging from 0.39 to 0.49 for the three SUMD general items,  $p < 0.0001$  in all cases) Higher insight was related to a stronger therapeutic alliance (SCC ranging from 0.38 to 0.48,  $p < 0.0001$ ). The path analysis revealed a positive impact of insight on adherence and alliance and that stronger alliance was related to lower clinical severity (lower CGI score). **CONCLUSIONS:** Insight and adherence were found to be closely related. Insight impacts on the therapeutic alliance with mental health professionals. These factors are associated to treatment outcomes.

#### PMH11

##### SOCIAL CONTACTS REDUCE NEGATIVE SYMPTOMS, ESPECIALLY EMOTIONAL WITHDRAWAL IN PATIENTS WITH SCHIZOPHRENIA

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**OBJECTIVES:** In schizophrenia, negative symptoms - especially emotional withdrawal (EW) - represent an important dimension, and are associated to a significant burden. Social contacts are likely to reduce negative symptoms and ameliorate quality of life (QoL) over time. Our objective was to test whether this hypothesis was verified in a large cohort of European patients with schizophrenia. **METHODS:** We

used data from the EuroSC study, a longitudinal cohort of 1208 patients with schizophrenia followed for 2 years. Every 6 months, the collected information included QoL-Interview, from which the Global Satisfaction Score (GLS) and the frequency of social contacts score were derived, and the Positive And Negative Symptoms Scale (PANSS), from which EW score was derived. After bivariate and correlation analyses, we tested whether few social contacts at baseline would predict greater EW and lower GLS after 2 years when adjusted on baseline level. Finally, random-effects regression analyses were performed to test the longitudinal effect of social contact, adjusting on potential confounding factors. **RESULTS:** Bivariate and correlation analyses established a link between frequency of social contact and both EW score (-0.24,  $p < 0.001$ ) and negative factor scale (-0.30,  $p < 0.0001$ ) at each time point. Few social contacts at baseline were associated with greater EW ( $p = 0.013$ ) and worse negative factor score ( $p = 0.009$ ), when compared to baseline. A trend for prediction of better QoL was also found, although not reaching significance. Random effects regressions confirmed the significant impact of social contacts over time on EW ( $p < 0.0001$ ), negative factor score ( $p < 0.0001$ ) and QoL ( $p < 0.001$ ). **CONCLUSIONS:** Given consistent effects of social contacts on reduction of negative symptoms and improvement of QoL in schizophrenic patients, social contacts should be used as a therapeutic tool. A higher frequency of social contacts could be obtained by regular therapeutic groups offered to these patients.

#### PMH12

##### OUTPATIENT TREATMENT OF ADOLESCENTS IN JAPAN WITH DRUGS FOR ATTENTION DEFICIT DISORDERS

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**OBJECTIVES:** To examine prescription patterns of drugs for the treatment of attention deficit disorders in Japanese children and adolescents. **METHODS:** We conducted a cross-sectional survey during October 2013 on outpatients aged 19 years or less in 34 private mental clinics. Patients who were prescribed at least one drug for the treatment of attention deficit disorders were analyzed in this report. Data were extracted on gender, age, principal psychiatric diagnosis (based on ICD-10), and types and doses of psychotropic drugs. **RESULTS:** The samples consisted of 286 males and 51 females. The average age (standard deviation) was 11.6 years (3.1). The mean length of psychiatric treatment was 21.3 months (24.0). The most frequent principal diagnostic category was "behavioral and emotional disorders with onset usually occurring in childhood and adolescence" (F9;  $n = 237$ ), followed by "disorders of psychological development" (F8;  $n = 99$ ), and "mental retardation" (F7;  $n = 1$ ). Of 337 samples, 247 (73.2%) were prescribed OROS methylphenidate (OROS-MPH), a psycho-stimulant, while 141 (41.8%) received atomoxetine (ATMX), a selective noradrenalin reuptake inhibitor. OROS-MPH/ATMX combination therapy was administered to 51 (15.1%) of 337 patients. Antipsychotics were concurrently prescribed in 80 (23.7%) patients. Mood stabilizers were co-prescribed in 20 (5.9%) cases. Antidepressants were co-prescribed in 19 (5.6%) patients. Anxiolytics/hypnotics were concurrently prescribed in 13 (3.9%) patients. **CONCLUSIONS:** In Japan, nearly one-sixth of the outpatients with attention deficit disorders received OROS-MPH/ATMX combination therapy.

#### PMH13

##### THE QUALITY OF PRESCRIBING FOR PSYCHIATRIC PATIENTS

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**OBJECTIVES:** Prescribing for adult psychiatric patients is often highly complex due to the nature of psychiatric conditions, but also due to somatic comorbidity. Therefore, the aim of this study was to identify prevalence and types of potential inappropriate prescribing (PIP), assess the severity of potential clinical consequences and identify possible predictive factors of PIP. **METHODS:** The study was designed as a prospective study of PIP using medication reviews. Patients who were admitted during a 4 month period (August 2013 - November 2013) to a psychiatric university hospital were included ( $n = 219$ ). The medication reviews, including an assessment of potential severity, were carried out by clinical pharmacologists after admission and after the attending physician had seen the patient. Frequencies and categories of PIP were analyzed in absolute numbers and as percentages. Severity of PIP was assessed using four categories. Logistic regression analysis was used to identify possible predictive factors of PIP. **RESULTS:** The proportion of patients with one or more PIPs was 123/219 (56%). "Interaction between drugs" was the most common category for potentially serious and potentially fatal PIPs with 49/123 (40%) and 32/45 (71%), respectively. Of 32 identified potentially fatal drug-drug interactions, 15/32 (47%) involved two or more antipsychotic drugs and 12/32 (37%) involved antipsychotic drugs in combination with antidepressants. The remaining 5/32 (16%) potentially fatal drug-drug interactions involved propranolol, erythromycin, simvastatin and promethazine. After adjusting for age, gender, alcohol/substance abuse, number of prescriptions, number of somatic diagnoses and level of kidney function, only polypharmacy (>5 prescriptions) increased the odds for a PIP significantly; OR=4.82 (95%CI: 2.33-9.98),  $p < 0.0001$ . **CONCLUSIONS:** PIP is frequent and might have serious or fatal consequences. Special attention should be given to drug-drug interactions involving antipsychotics and antidepressants but also somatic medications and polypharmacy threatens medication safety. There is a pressing need to improve the quality in prescribing for psychiatric patients.

#### PMH14

##### THE PREVALENCE AND DISEASE BURDEN OF TREATMENT-RESISTANT DEPRESSION - A SYSTEMATIC REVIEW OF THE LITERATURE

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