

milk with lactogouges (metclopromide) and structured counseling of mothers, using the new technology of isotope labeling in a community in Rawalpindi, Pakistan. A random sample of 200 lactating mothers having complaints of reduced breast milk production is being recruited from well baby clinic of participating hospitals. All should be practicing exclusive breastfeeding with infants from 2-3 months of age. Their perceptions regarding their breast milk production is assessed. They are randomized into four groups. Group one will be given oral metclopromide, groups 2 will be given structured counseling by trained health workers and group 3 will receive placebo whereas group 4 will receive CBT. Breast-milk production will be measured at completion of 4 weeks of intervention by using the dose-to-the-mother deuterium oxide method also validated in Pakistan by the investigators to a limited sample. Differences in the groups of mothers will be estimated using appropriate statistical techniques, while controlling for possible confounders. Outcome of the study would be able to demonstrate that lactogouges, or simple counselling may have an effect on increasing the breast milk quantity of mothers and also effect of interventions on their perceptions. The results of the study could have a major impact on the breastfeeding teachings and practices in our society which in turn has a potential to improve and have a significant impact on one of the main Millennium Development Goals i.e. child mortality and morbidity.

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## Free Communications

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### FC03.01

The decrease of prefrontal theta QEEG cordance value predicts response to Venlafaxine treatment in patients with resistant depression

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**Backgrounds:** Previous studies of patients with unipolar depression have shown that early decreases of prefrontal quantitative EEG (QEEG) cordance in theta band can predict clinical response to various antidepressants. We now examined whether reduction of prefrontal cordance value after 1 week of venlafaxine treatment predicts clinical response to venlafaxine in non-responders to previous antidepressant treatments.

**Methods:** We analyzed 25 inpatients, who finished 4-week treatment with venlafaxine. EEG data were monitored at baseline and after 1 week of treatment. QEEG cordance was computed at 3 frontal electrodes in theta frequency band. Depressive symptoms were assessed using Montgomery-Åsberg Depression Rating Scale (MADRS).

**Results:** Eleven of 12 responders (reduction of MADRS  $\geq 50\%$ ) and only 5 of 13 non-responders decreased prefrontal QEEG cordance value after the first week of treatment. The decrease of prefrontal cordance after week 1 in responders was significant ( $p=0.03$ ) and there was no change in nonresponders. Positive and negative predictive value of cordance reduction for response was 0.7 and 0.9, respectively.

**Conclusion:** The reduction of prefrontal theta QEEG cordance value after first week of treatment is a useful tool in the response prediction to venlafaxine.

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### FC03.02

One-year course and predictors of outcome of adolescent depression

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**Background and Aims:** The mean episode duration of adolescent major depression is 4 – 9 months among clinically referred youths, recovery rates vary between 35% - 90%, and recurrent episodes are common. In naturalistic studies comprising less selected populations than clinical trials, comorbid psychiatric disorders, poor psychosocial functioning and severity of depression at study entry are among the most consistently reported clinical predictors of less favorable prognosis of youthful depression.

The study aimed at studying the one-year course and at investigating the impact of characteristics of the depressive episode and comorbidity on the one-year outcome of adolescent depression.

**Method:** A sample of 179 consecutive adolescent (13-19 years) psychiatric outpatients and 17 school-derived matched controls, all with unipolar depressive disorders at baseline, were reinterviewed for DSM-IV Axis I and II disorders at 12 months.

**Results:** The outpatients had equal recovery rate and episode duration, but shorter time to recurrence than the controls. Fifty percent of the outpatients and 65 % of the depressed controls recovered during the follow-up, 13% of the outpatients and 29% of controls had at least one recurrent depressive episode. Among the outpatients, Axis II comorbidity predicted shorter time to recurrence. Longer time to recovery was predicted by earlier lifetime age of onset for depression, poor psychosocial functioning, depressive disorder diagnosis, and longer episode duration by study entry, with an interaction between episode duration and depressive disorder diagnosis.

**Conclusions:** Characteristics of depression generally predicted the outcome better than comorbidity. Axis II comorbidity has prognostic value in adolescent depression.

### FC03.03

Drug consumption, health service use and outcome in opiate addicts in Europe: An 18-month follow-up from athens to zurich

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The aim of the TREAT-study (Treatment-systems Research on European Addiction Treatment) is the comparison of the course of predominantly opiate dependent patients from six European regions concerning severity of illness, health service use and heroin-use.

**Method:** TREAT is a collaborative multi-centre-study conducted in Athens, Essen, London, Padua, Stockholm and Zurich which includes three repeated measures over a period of 18 month (T1-T3). Apart from the Europ-ASI, questionnaires for comorbid disorders and the utilisation of the treatment system were administered. The sample comprised about 100 subjects per region diagnosed with opiate addiction. 317 patients (53%) were retrieved for all three measures.

**Results:** With some exceptions in all centres health service use by patients could be increased during the observation period. The severity of addiction decreased in almost all regions.

In a statistical model comprising all subjects who completed the study, the best predictor for abstinence was the number of detoxification treatments but also participation in long-term rehabilitative therapy. Patients with additional severe alcohol consumption at the beginning of the study had a higher risk for continuous drug use.

A second regression-model assumed that participants who had dropped out were still dependent on opiates. Again the combination of heroin and alcohol appeared to be a negative predictor. Patients in methadone maintenance treatment suffering from major depression showed a more positive outcome.

**Discussion:** Regional differences concerning patients' characteristics, health services and drop-out rates give reason for a cautious interpretation. The study describes high- and low-risk-groups as hints for the effective allocation of resources.

### FC03.04

The neural correlates of decision-making in bipolar disorder: An fMRI study

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**Background and Aims:** Poor decision-making is a prominent feature of Bipolar Disorder (BD) suggesting that patients may be impaired in affective aspects of complex problem solving. We examined the neural correlates of emotional learning (EL) in remitted BD patients and healthy controls (HC).

**Methods:** Subjects comprised three groups: (a) 11 remitted BD patients with EL (b) 11 remitted BD patients who failed to show EL and, (c) 11 HC with EL. All groups were demographically matched. Patients were also matched on clinical variables. Participants underwent functional magnetic resonance imaging (fMRI) while performing the Iowa Gambling Task. In the active condition participants relied upon EL to weigh up short-term rewards against long-term losses, in order to achieve an optimal gambling strategy. The control condition was identical to the gambling condition except for the reward/loss component. Behavioural and neural responses associated with the overall task performance were assessed.

**Results:** Regardless of their performance in EL, BD patients, compared to HC, showed increased task-related activation in the insula and ventral anterior cingulate gyrus. BD patients with EL showed increased activation in left frontopolar and ventrolateral prefrontal

cortices while reduced activation was noted in the same regions in BD patients who failed to show EL.

**Conclusions:** BD patients showed evidence of increased limbic activation associated with affective decision-making. Their ability to attain emotional learning was associated with increased recruitment of frontopolar and ventral prefrontal cortex regions. This finding may reflect a successful compensatory response to limbic overactivation during affective decision-making.

### FC03.05

Substance use disorders among eating disorders and impulse control disorders: Personality and clinical correlates

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**Background and Aims:** Given the clinical similarity and the frequent comorbidity between impulse control disorders and certain eating disorders (ED) such as bulimia nervosa, we aimed to compare personality and clinical profiles of individuals with and without substance use disorders (SUD) who had primary diagnoses of ED or impulse control disorders, namely pathological gambling (PG).

**Methods:** 1096 ED [91.8% females] and 1120 PG [92.4% males] patients were assessed for the presence of SUD. All patients were consecutively admitted to our Psychiatry Department and diagnosed according to DSM-IV-TR criteria. We administered the Temperament and Character Inventory-Revised (TCI-R), the Symptom Checklist-90-Revised (SCL-90-R), and other clinical indices. Lifetime substance use included alcohol and other substances and was measured with the SCID-I. Student-Fisher t-tests were used to compare clinical features. Binary logistic regression models were used to analyse personality predictors of comorbidity with SUD. Adjustments for sex, age, and specific diagnosis were applied.

**Results:** High Novelty Seeking, low Reward Dependence and low Self-Directedness were predictive of SUD in the whole sample independent of diagnosis ( $p < 0.01$ ). In the PG sample only, after adjustment for sex and age, Reward Dependence was no longer associated with SUD. Patients of both clinical samples with SUD showed higher SCL-90-R scores and severer eating and gambling symptoms (respectively).

**Conclusions:** Our results suggest that high Novelty Seeking, low Reward Dependence and low Self-Directedness are associated with lifetime SUD, which is also associated with a severer presentation of the primary disorder. This pattern holds across different populations such as ED and PG.

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## Symposium: The new acute mental patient: Diagnostic constructs and treatment innovation in emergency psychiatry

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### S53.01

Toward DSM v: Why the new acute mental patient deserves more study