<sup>2</sup> Max-Planck-Institute for Experimental Medicine, Goettingen, Germany

In our rehabilitation center patients with multiple drug abuse were treated with multimodal therapy, including medical care, medication, information, work and behavioral therapy in different settings, social support and sports. The patients live in a clinical setting with controlled abstinence.

To prove the effectiveness of this kind of therapy, we matched the patients using the following criterias: age, gender, comorbid psychiatric disorders (according to DSM-IV first axis), cluster of personality disorder (following DSM-IV clustering), duration of addiction (years), age of onset and socio-demographic status and education. Patients with somatic disorders, brain injury or epilepsy were excluded from the analysis. The GAF-development during the course of therapy was weekly monitored. We analysed the modification of GAF-scores according to global and specific therapeutic (i.e. duration of therapy) effects. Patients were in average 24 years old and showed addiction symptoms since 7.8 years. Treated were 150 male and 72 female patients. They all showed comparable levels of education. GAF-progression shows a very strong correlation (r=.825; p<.001) with the duration of multimodal therapy. Interestingly, GAF-progression was independent from comorbid disorders, education or gender. According to our results, we conclude that multimodal abstinence-orientated rehabilitation therapy in patients with multiple drug abuse is highly effective and correlated to duration of therapy.

## P212

Impaired abstraction and symbolization abilities in subjects with panic disorder

F. Mancuso, P. Bucci, R. Zamboli, E. Plaitano, A. Mucci, S. Galderisi, M. Maj. *Department of Psychiatry, University of Naples SUN, Naples, Italy* 

Few studies were carried out, so far, on neuropsychological aspects of panic disorder (PD). Impairments involving memory, verbal learning, visuospatial abilities, divided attention and executive functioning have been reported; however, some studies found no difference between patients with PD and healthy subjects (HS). Discrepancies might be due to either the use of different tests for neuropsychological assessment or the inclusion of different patient populations (e.g. medicated, unmedicated).

In the present study general cognitive abilities, focused and sustained attention, incidental learning, secondary memory and the ability to suppress interference were evaluated in 28 drug-free patients with PD and 32 HS, matched for sex, age, educational level and handedness. In patients with PD frequency and intensity of panic attacks, anticipatory anxiety, main phobias and avoidance state, along with severity of anxiety and depressive symptoms, were also assessed.

Compared to HS, PD patients showed: 1) lower scores on tests assessing general cognitive abilities, 2) higher accuracy on the test exploring spatial incidental learning, 3) higher degree of interference on a test exploring secondary memory for non verbal materials. No correlation was observed between neuropsychological and psychopathological indices.

Our results suggest an impairment of abstraction and symbolization abilities in patients with PD. Differences in susceptibility to interference on the non verbal memory task may reflect an executive dysfunction involving orbito-frontal and cingulate cortices.

## P213

Alexithymia and emotional stimuli processing in panic disorder

F. Mancuso, R. Zamboli, R.M. De Santo, M. Chieffi, A. Mucci, S. Galderisi, M. Maj. *Department of Psychiatry, University of Naples SUN, Naples, Italy* 

In subjects with panic disorder (PD), previous studies have reported a high prevalence of alexithymia, a poor inhibition of emotional interferent stimuli on the Emotional Stroop test, and a recognition bias toward fear for facially expressed emotions. Other studies, however, have reported no difference between PD patients and healthy subjects (HS) for emotional stimuli processing.

Twenty-eight drug-free patients with PD and 32 HS were included in the study. The two groups did not differ for age, sex, education level and handedness. The Toronto Alexithymia Scale-20 items (TAS-20) was used to evaluate alexithymia. The Emotional Stroop test was administered to evaluate the ability to suppress interference from different emotional valence stimuli. The Bouhuys' test was used to evaluate the perception of facially expressed emotions.

Compared to HS, patients with PD showed: 1) higher frequency of alexithymia and borderline alexithymia, in particular higher scores on the first (difficulty in identifying feelings) and the second (difficulty in describing feelings) dimension of alexithymia; 2) higher mean reaction time on the Emotional Stroop test for panic-related stimuli; 3) no difference on the Bouhuys' test.

Our data suggest that, in patients with PD, a reduced awareness of emotional experiences, which characterize alexythimic subjects, may underly anxiety symptoms and panic attacks, leading to a failure to identify emotional reactions with a preferential activation of alarm and defence behaviours.

## P214

A relationship between social anxiety and oxytocin.

D. Marazziti, S. Baroni, M. Catena, M. Picchetti, M. Carlini, G. Giannaccini, A. Lucacchini, L. Dell'Osso. *Department of Psychiatry, Neurobiology, Pharmacology and Biotechnologies, University of Pisa, Pisa, Italy* 

**Background and aims:** In the present study we aimed to explore the possible relationships between plasma oxytocin levels and romantic attachment in a group of healthy subjects.

**Methods:** Forty-five healthy subjects with no family or personal history of any major psychiatric disorder were enrolled in the study. Thirty-three subjects had a current romantic relationship with a mean duration of 80.5 months (ranging from a minimum of one month to a maximum of 25 years); the remaining 12 had no current relationship. The romantic attachment was assessed using the Italian version of the "Experiences in Close Relationships" (ECR).

**Results:** Plasma oxytocin levels were unrelated with age, gender, marital status, or length of the relationship and ranged between 0.13 and 4.59 pg/ml (mean+SD: 1.53+1.18). A significant and positive correlation was observed between the anxiety scale of the ECR and oxytocin levels (r=0.30, p=0.04). On the other hand, the correlation between the avoidance scale and oxytocin levels was not significant (r=0.12, p=0.42). The distribution of attachment styles was twenty-six (57.8%) subjects showed a secure attachment, 12 (26.7%) a preoccupied, 5 (11.1%) a fearful/avoidant and 2 (4.4%) a dismissing style. Although no statistical correlation was observed between these styles and oxytocin levels, the preoccupied style of attachment was related to higher peptide concentrations.