

remarkable for low Self-directedness, indicating immature individuals with increased risk of personality disorder. Their mothers were distinguished by low Self-directedness indicating an high risk of personality disorder. The fathers were low in Persistence and Self-directedness indicating an inert and immature personality.

The bulimic family had low Self-directedness as a common denominator observed in all family members. This finding indicates that the psychopathology of bulimia nervosa combines the tendency to anxious and depressive reactions with low character development. None of the above temperament and character profiles is pathognomonic of BN. Rather, individual psychopathologies of each family member interact within a unique familial setting generating in susceptible members (daughters) the syndrome of BN.

The observation of that both temperament and character have important role in the etiopathogenesis of BN has important treatment ramifications.

The TCI was very useful in discriminating between normal controls and bulimic subjects, their parents, and the whole bulimic family.

### P02.303 STUDY OF PSYCHOTIC DISORDERS WITH ARTIFICIAL NEURAL NETWORKS

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**Introduction:** During the recent years advances in artificial intelligence (AI) and particularly in the connectionist models are being used by psychiatrists in an attempt to explain brain function. Also neural networks have begun to receive attention in the investigation of clinical decision-making problems. The new paradigm seems to give practitioners some hope that the further understanding of mental illness could be greatly enhanced by the new prototypes.

**Objective:** The aim of this paper is to develop a neural network system that it will be used to implement a diagnostic expert system with a sample of psychotic patients.

**Hypothesis:** We investigate the hypothesis that a non-linear classification of psychotic cases into and subtypes by an neural network is more accurate than the linear classifications carried.

**Material and Method:** The sample consisted of 200 psychotic inpatients who met the following criteria: ages between 15 and 75 and having the presence on admission of delusions. Candidates for study who had mental retardation, questionable diagnoses, known organic dysfunction, alcoholism or drug related disorder were excluded. After a washout period (24 hours) and before taking medication the patients were assessed by two interviewers with a questionnaire to know several phenomenological characteristics of delusions and with CPRS scale

**Results:** It was obtained an auto-organizer map to classify psychotic patients. It was established different clusters with different diagnostics. Also it was obtained the relation between psychotic disorders. Delusional disorder is related to Schizophrenia, Schizophreniform disorder, psychotic disorder not otherwise specified, Schizoaffective disorder (bipolar type) In the map bipolar disorder with psychotic symptoms and major depressive disorder with psychotic symptoms appeared far from paranoia

**Conclusions:** 1. Decision making is a complex phenomenon and other mechanical decision tools as artificial neural networks could be incorporated into parts of the clinical decision making in order to improve it. 2. Artificial neural networks have a prominent role in decision support for delusional disorders. 3. Artificial neural

networks give information about the relation between delusional disorder.

### P02.304 PREDICTING OUTCOME OF FIRST EPISODES OF SCHIZOPHRENIA

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**Introduction:** There have been a large number of studies of outcome in Schizophrenia. These studies have provided many suggestions about important variables in understanding and predicting outcome. However, there many methodological and conceptual issues. The present two-year follow up study applied multiple outcome criteria to investigate prognosis factors in Schizophrenia.

**Objectives:** The aims of the present study were: 1. To study outcome patterns in Schizophrenia compared with other disorders. 2. To Know the relationship among the four areas of Strauss-Carpenter scale. 3. To evaluate the relative prognostic contributions of both background and psychopathological variables in Schizophrenia

**Hypothesis:** A higher total score on negative symptoms at index admission predict poor outcome at two years follow-up. A higher total score on negative symptoms at two years follow-up period predict poor laboral function.

**Material and Method:** The initial sample consisted of 102 patients with first psychotic episodes admitted to Hospital Virgen of Arrixaca. Of the 102 patients, 46 were diagnosed as Schizophrenic. A battery of clinical and sociodemographic measures were used at index admission. After two-years follow-up period 80 patients were re-assessed in the same terms. Also it was used Strauss-Carpenter scale to evaluate outcome function in the following four areas: frequency of social contacts, percentage of time employed, severity of symptomatology and amount of time spent out of the hospital during the past year. Multiple regression analysis were used to find predictor variables of outcome.

**Results:** At index admission and at two years follow-up period Schizophrenic patients had higher scores on all negative symptoms except attention deficits than non Schizophrenic patients. At index admission Schizophrenic patients scored higher on Hamilton Scale than the other group. It was found significant difference on outcome scores in both groups.

**Conclusions:** At index admission clinical and sociodemographic variables do not predict outcome in Schizophrenia. At two years follow-up a higher total score on negative symptoms predict poor laboral function.

### P02.305 A COMPARISON OF ENGLISH AND ITALIAN DRUG LEGISLATION, THEIR POLICIES OF INTERVENTION AND ANY CONSEQUENCES UPON STRESS AND BURNOUT AT WORK

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One of the particular characteristics of the "Helping Services and the Helping Professions" is that the workers are the direct instruments of that help. In particular, in the Drug Addiction Services, the wellbeing and the stability of the helper are one of the most important presuppositions of being able to carry out therapeutic work.

But in these services, the strong investment in the relationship with the drug users and with the phenomenon of drug addiction

present the worker with heavy professional, relational and emotional stress.

Many variables are involved: the organisational structure, the individual factors, the historical and cultural factors and the policies and strategies for intervention.

In the '90's, the philosophy and the policy of Reduction of Harm and the philosophy of Recuperation and Rehabilitation appeared to be the prevalent working guidelines in these Services. Thus it appears significant to know and analyse the different legislation in the two countries, the typologies of interventions and the organisation of the services and evaluate the presence and level of stress in the workers.

The hypothesis of the research is that the workers' stress is in relation to the objectives and styles of intervention in the Service.

### P02.306

#### SMOOTH PURSUIT EYE MOVEMENT (SPEM) IN BULIMIA NERVOSA

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The eye movement abnormality appears only when the subject tracks a moving target. We have traced this abnormality to a deficit in velocity sensitivity, a function that is regulated by a specific central nervous system network that includes the middle temporal and medial superior temporal areas of the extra-striate cortex. The performance of pursuit eye movements induced activations in the conical eye fields also activated during theta execution of visually guided saccadic eye movements, namely in the precentral cortex (frontal eye field), the medial superior frontal cortex (supplementary eye field), the intraparietal cortex (parietal eye field), and the precuneus, and at the junction of occipital and temporal cortex.

The aim of the present study is to investigate smooth pursuit eye movement and saccadic performance in bulimia nervosa to determine if functional links can be made between eye movement performance and clinical features.

**Method:** SPEM were induced by oscillating red point and recorded by electrooculogram. These variables were scored by 2 physicians on blind method: the amplitude of the point (AB), the amplitude of saccadic movement (AK), irregularities superimposed on the tracking curve shorter than 0.1 s (MS), irregularities superimposed on the tracking curve longer than 0.1 s (VS), desintegration of the tracking curve (D), and the whole patterns of tracking curve (CT).

Clinically, each patient was assessed using the Eating Disorder Inventory (EDI) and Hamilton Scale for Depression (HRSD).

### P02.307

#### ALEXITHYmia CORRECTION AT HYPERTENSION PATIENTS WITH AFFECTIVE DISORDERS

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The purpose of this study using hypertensive patients was to examine the validity and reliability of the current measures of alexithymia and affective disorders. The diagnosis of affective disorders was corresponded with ICD-10 criteria. The daily monitoring of arterial bloodpressure was conducted using the SpaceLabs Medical - 90207 ambulatory blood pressure monitor. For the estimation of the level of anxiety we used the Hamilton (HARS) and Taylor scales. The level of depression was measured by two

scales: Montgomery-Asberg (MADRS) and Zung. Instrument that investigated alexithymia was Toronto Alexithymia Scale (TAS-26).

Based on the sample of outpatient subjects, it was shown that hypertensive patients with affective disorders have the higher level of alexithymia. At the same time the patients with alexithymia demonstrate discrepancy between the level of arterial blood pressure and their subject sensations.

We conclude that alexithymia, that is, poor ability to experience and express emotions and sensations is associated with hypertension. The disturbance of treatment by the hypertensive patients with alexithymia and affective disorders is associated with poor ability to experience sensations. So treatment of the patients with hypertension had to correlate with the correction of alexithymia.

### P02.308

#### PSYCHIATRIC CO-MORBIDITY AMONG AMPHETAMINE USERS: RELATIONS TO AMPHETAMINE-INDUCED PSYCHOSIS

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Amphetamine-induced psychosis (AIP) has been viewed as a model of schizophrenia. However the reasons why some individuals develop psychotic symptoms, whilst others do not despite prolonged amphetamine usage, are not clear. This study is part of a project that aims to investigate factors predisposing to amphetamine-induced psychosis. We set out to examine the differences in psychiatric comorbidity and pre-morbid personality between amphetamine users with psychotic experience and those without. A total of 392 amphetamine users were recruited from a psychiatric hospital and a detention house in Taipei. They were divided into those with psychotic experience as cases (127) and those without as controls (265) after assessment with the Diagnostic Interview for Genetic Studies (DIGS) and the Family Interview for Genetic Studies (FIGS). Diagnoses of amphetamine-related disorders and other co-morbid psychiatric disorders were made according to the DSM-IV criteria. Information about pre-morbid function and personality were obtained by telephone interview with the mothers using the Assessment of Premorbid Schizoid and Schizotypal Traits (PSST) and the Assessment of Premorbid Social Adjustment (PSA). The most prevalent coexisting psychiatric disorders were additional substance use disorders. The case group had significantly higher prevalence rate of mood disorders ( $p < 0.001$ ), alcohol use disorders ( $p < 0.001$ ), pathological gambling ( $p < 0.01$ ), antisocial personality disorder ( $p < 0.001$ ) and had a higher mean PSST score ( $p < 0.05$ ) than the control group. These psychiatric disorders or pre-morbid personality might play, at least to a certain extent, roles predisposing individuals to developing psychosis after amphetamine use.

### P02.309

#### PSYCHIATRIC MORBIDITY AMONG JUVENILE DRUG OFFENDERS

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This study aims to investigate the magnitude and extend of substance use among juvenile illicit drug offenders and their psychiatric morbidity in a custodial facility. One hundred juvenile illicit drug offenders at a detention center were assessed for substance