

**Conclusions:** First-episode psychosis African-Caribbean patients show less neurological abnormalities than White British patients. This might indicate different risk factors for developing psychosis in the two groups.

### P01.138

#### THE INFLUENCE OF FAMILIAL LOADING ON THE COURSE OF SCHIZOPHRENIC SYMPTOMS AND THE SUCCESS OF PSYCHOEDUCATIONAL THERAPY

R. Feldmann<sup>1</sup>\*, W.P. Hornung<sup>2</sup>, G. Buchkremer<sup>3</sup>, V. Arolt<sup>4</sup>.  
<sup>1</sup>Department of Pediatrics, University of Muenster; <sup>2</sup>Rheinische Kliniken Bonn; <sup>3</sup>Department of General Psychiatry; <sup>4</sup>Department of Psychiatry, University of Tuebingen; <sup>4</sup>Department of Psychiatry, University of Muenster, Germany

Psychoeducational and cognitive-behavioral interventions for schizophrenic outpatients and their key persons have had impressive long-term effects on the course of schizophrenic illness in terms of a markedly reduced rehospitalization rate. However, they appear to have no overall impact on psychopathological symptoms. This prospective study examines the influence of familial loading on the course of schizophrenic illness and the extent to which this is modifiable by psychoeducational training as a form of psychotherapy.

191 schizophrenic patients enrolled in the study were allocated by random into four different treatment groups and one control group. 40% of the patients had mentally ill relatives, 20% with some form of schizophrenia. Patients attending the training and those in the control group were examined before and immediately after psychoeducational training and at 2-year and 5-year follow-ups.

Control-group patients with mentally ill relatives displayed a significant increase in psychopathological symptoms and rehospitalization rate than those without. The psychoeducational training arrested or even improved the increase in psychopathological symptoms in patients with mentally ill relatives.

Familial loading contributes substantially to a high rehospitalization rate and a poor outcome of schizophrenic patients. Psychoeducational interventions are an appropriate means of arresting this unfavorable development.

### P01.139

#### TREATMENT OF SICK DOCTORS. THE EXPERIENCE OF A SPECIALIZED UNIT

A. Gual. *Unitat d'Alcoholologia de la Generalitat de Catalunya, Hospital Clinic, Spain*

Sick doctors are a relevant problem for the Health System. The College of Physicians of Barcelona created in 1998 a specialized treatment program with inpatient and outpatient facilities, were 106 doctors have been treated during 1998 and 1999.

Mean age of sick doctors was 46.7 years. 79% of the sample were men, mainly living in Barcelona (80%). Main diagnosis at entry was alcoholism in 32% of cases, other addictions in 21%, and mental diseases in 47% doctors. 12% of sick doctors approached the program under the pressure of Medical Institutions, while 24% approached it through the suggestions of colleagues. The remaining 64% came either on a voluntary basis or pressed by their relatives. 25% of the cases have undergone inpatient treatment with a mean length of stay of 30 days.

The main features of the Program as well as clinical results will be discussed.

### P01.140

#### COMPARISON OF DEPRESSIVE DISORDERS IN YEARS 1990 AND 1999

E. Panagoulas\*, K. Dailianis, P. Papadopoulos, G. Tychoopoulos. *Peristeri Mental Health Center, 19 Ploutonos & Hephæstou, GR 12135 Perister, Athens, Greece*

Peristeri Mental Health Center was established at 1990 in a western suburb of Athens. It's a community oriented organization with a middle class population in its catchment area.

The aim of this report was to find out the possible differences among two groups of clients with depressive disorders, who came to the Center, the first group during 1990 and the second group during 1999, as new cases.

We examined the medical records of adult clients with diagnosis Major Depression and Dysthymia and analyzed the following parameters: sex, age, education level, profession, marital status, referral source, psychiatric treatment in the past, hospitalizations, psychotherapy, drug therapy and outcome.

From our findings we can mention: a) 50% of the clients of the year 1999 were less than 40 years old, in opposite to the year 1990 where the same ages were only 25%, b) the education level was significantly higher for the year 1999, c) about the referral source, we underline the finding that the clients referred by other clients were doubled and those referred by themselves were tripled, from 1990 to 1999, d) we have a remarkable increase (1999) in using SSRIs and SNRIs instead of TCAs (1990) and e) we have better outcome the 1999 than 1990, e.g. Great improvement: 23.3% vs. 17.7% and Moderate Improvement: 35.0% vs. 22.3%.

### P01.141

#### ADHERENCE TO ANTIRETROVIRAL THERAPY AMONG PATIENTS IN A METHADONE MAINTENANCE PROGRAM

G. Perez\*, M. Torrens, R. Martin-Santos, C. Castillo, J. Sangorrin, M. Cabre. *Unitat de Recerca en Psiquiatria, IMIM - Hospital del Mar, 25-29 Pg. Maritim, 08003 Barcelona, Spain*

**Introduction:** The widely used Highly Active Antiretroviral Therapies (HAART) for patients affected by HIV-1 infection, has renewed the interest in factors related to adherence, due to the increasing evidence about the development of viral resistant strains and their transmission (Friedman and Williams, 1999; Markowitz et al., 2000). This issue is most important in subgroups of Intravenous Drug Users (IDU) (Sherer, 1998). We present here a study of adherence and related factors in former IDUs, now following a methadone maintenance program.

**Material and Methods:** 53 patients (68% men; 32% women) on HIV antiretroviral therapy were assessed through a semistructured interview on their adherence patterns to that medication, and present attitudes and psychosocial factors related.

**Results:** Most patients (66%) informed of a correct adherence (>95%) but still there's an important subgroup with insufficient adherence (14%) and another which abandoned treatment at all (20%). Most subjects didn't know anything about resistance associated with imperfect adherence (60%). There was no relationship to depression as measured by BDI, to number of pills or medications, or to percentage of recent positive controls on cocaine. Nevertheless knowledge of resistance issues and a proper social support to follow the regime showed a very strong discriminative bias in favor of very adherent subjects.

**Conclusions:** There's a strong need to develop new strategies to improve adherence in these patients, though they show an overall good disposition to achieve it. Mainly, clinicians should address educational issues on resistance, proper scheduling of medications,

adequate psychosocial support, and better coordination between infectious-diseases and substance-use clinic teams.

### P01.142

#### EEG OF RELATIVES OF SCHIZOPHRENICS: PECULIARITIES AND ASSOCIATIONS WITH COGNITIVE AND CT PARAMETERS

L. Uvarova\*, V. Golimbet, M. Alfimova, N. Savvateeva, Y. Yurov, V. Trubnikov. *Mental Health Research Centre RAMN, Zagorodnoe shosse 2, korp. 2, 113152 Moscow, Russia*

The aim of the present study was to search for EEG parameters associated with genetic liability to schizophrenia. Absolute power values of EEG frequency bands of 148 first degree relatives of schizophrenics (100 parents, 48 sibs) were compared with those of 70 ICD-10 schizophrenics and 49 controls. As compared to controls, two relatives groups and the patients showed significantly higher mean power values of delta, theta, beta 1 and beta 2 activity in almost all sites during rest condition and while performing verbal and spatial tasks. In relatives, cognitive dysfunction was reflected by increased mean delta power of resting EEG in the left anterior and bilateral occipital regions and with a task-related increment in theta power over frontal areas. Topography of task-induced EEG changes suggested that genetic predisposition to schizophrenia might be associated with a deviation of interhemispheric balance, namely, with increased reactivity of the right hemisphere during mental arithmetic and verbal fluency tasks and increased reactivity of the left hemisphere during a spatial task. Relationships between EEG power values and 17 CT and 9 cognitive variables were studied in 25 schizophrenic families. In relatives, the analysis revealed significant correlations between memory performance and measures of alpha-power and the III ventricle. Preliminary data on association of alpha-power and serotonin receptor 2A gene polymorphism were obtained.

### P01.143

#### CHARACTERISTICS OF PATIENTS REGISTERED IN DATABASES OF THE CLOZAPINE MONITORING SYSTEM IN SLOVAKIA

J. Pecenek\*, V. Novotny. *Department of Psychiatry, University Hospital, Bratislava, Slovakia*

**Background:** The monitoring programme for patients treated with clozapine (Leponex) started in Slovakia in 1995. The databases allow to assess some characteristics which could be regionally specific.

**Method:** Data of 588 patients registered in databases up to March 2000 were analyzed with the aim to assess some characteristics of patients treated with clozapine in Slovakia. The age at onset of treatment, the dosage of clozapine, co-medication with other psychopharmacological agents and the reasons for withdrawal of clozapine are described here.

**Results:** The mean/median age of patients at the start of treatment was 31/28 years for men and 34/32 years for women. The mean/median of the maximum documented daily dose of clozapine in any period of treatment was 171/150 mg/day. 180 patients who were treated with clozapine more than 5 months used one or more other psychopharmacological drug alone or in combination (87 neuroleptics including 29 neuroleptics in depot form; 73 antidepressants; 68 anxiolytics/hypnotics; 21 mood stabilizers; 53 antiparkinsonics and 9 patients nootropics). The mean/median daily dose of clozapine in patients using another neuroleptic was 193/175 mg/day. Leukopenia/agranulocytosis was the reason for withdrawal of clozapine in 11 patients.

**Discussion:** The results reflect some specifics of the treatment with clozapine in Slovakia. The lower age at the start of treatment, lower dosage and frequent co-medication are typical. The probable reasons could be that clozapine was never withdrawn from the market in our country and that rules for pharmacological treatment common in EU and U.S.A. are not yet completely implemented into the daily practice in Slovakia.

### P01.144

#### DISTRIBUTION OF SEROTONIN TRANSPORTER GENE VARIANTS IN HUMAN POPULATIONS: A POSSIBLE TOOL FOR UNDERSTANDING SOME ASPECTS IN PSYCHIATRIC EPIDEMIOLOGY

S. Papiol\*, B. Gutiérrez, B. Arias, A. Rosa, B. Matín, L. Fañanás. *Laboratory of Anthropology, Dept. Animal Biology, Faculty of Biology, University of Barcelona, Spain*

Prevalence of major psychiatric disorders is equally distributed among populations, what is considered an evidence for the existence of a genetic center dot component in the aetiology of these illnesses. It is unknown whether these genetic risk factors are the same or even if they have the same frequencies in all populations. A prior knowledge of both the current pattern of genetic diversity, and the evolutionary history of this diversity is necessary to answer such questions. Allelic distribution in different human populations for loci that show genetic variation with functional repercussion would be of interest for future studies (e.g. epidemiological) to determine the role of this kind of loci as possible disease risk factors. The serotonin transporter gene (SERT) is a particularly interesting candidate gene for involvement in neuropsychiatric disorders due to its role both in the regulation of serotonergic neurotransmission and in the mechanism of action of many psycho-drugs. In the past few years, there has been increasing evidence documenting association between the short (low activity) variant of a polymorphism located in the promoter region of SERT gene and major affective disorders. In the present study, we performed an accurate bibliographic search in order to investigate the distribution of allele frequencies for this polymorphism in different human populations.

Range of variation for short allele frequency in European-Caucasian populations was comprised between 39.4% and 50%. These frequencies significantly differ from those found in East Asian (70%–83%) and African (11.1%–35%) populations.

These data suggest a large potential for stratification in association studies, especially when samples come from heterogeneous populations. They also show the importance of population data to understand how genetic factors are involved in the origin of neuropsychiatric disorders.

### P01.145

#### AMYLOID BETA PEPTIDE 1–40 INFLUENCES A RECOGNITION SITE OF HEMICHOLINIUM-3 SENSITIVE CHOLINE CARRIERS AND THEIR PROTEOLYTIC DEGRADATION

Z. Křištofiková\*, H. Tejkalová. *Prague Psychiatric Centre, Ústani 91, 181 03 Prague 8, Czech Republic*

In recent years, great attention has been concentrated on the research of a role of different amyloid beta peptide (Aβ) fragments in the pathogenesis of Alzheimer disease. However, an important physiological role of soluble Aβ as an endogenous cholinergic neuromodulator of the basal forebrain area is also suggested. Data in the literature indicate a marked time- and dose-dependent inhibition of the high-affinity choline uptake associated