

medical. But they accept a dispensary observation. They think that the basic reason of existing disadvantages in psychiatric service is the current social and economic conditions in our country. There was a greatest percent of the respondents among the patients completely unsatisfied with a medical care who have specified that they were hospitalized without their consent (38 percents).

### P10.05

Mental health service systems in 5 Eastern and Western European regions

T. Kallert<sup>1</sup>\*, T. Adamowski<sup>2</sup>, A. Okine<sup>3</sup>, N. Bakova<sup>4</sup>, D. Borosova<sup>5</sup>. <sup>1</sup>*Department of Psychiatry & Psychotherapy, Technical University of Dresden, Germany*  
<sup>2</sup>*Akademia Medyczna we Wrocław, Poland*  
<sup>3</sup>*Queen Mary & Westfield College, London, UK*  
<sup>4</sup>*Charles University, Prague, Czech Republic*  
<sup>5</sup>*Psychiatricka nemocnica Michalovce, Slovak Republic*

**Objective:** Within the evaluation of day hospital treatment in a multi-centre EC-funded research project (EDEN-study) it is of great relevance to describe the components of the whole regional mental health service systems of the study centres' catchment areas. Participating centres are located in East Germany (Dresden), UK (London), Southern Poland (Wrocław), East-Slovakia (Michalovce) and Czech Republic (Prague). The varying stage of reforming mental health care increases the need to analyse differences in these service systems.

**Method:** The European Service Mapping Schedule (ESMS) was used to classify the full range of services identified within each of the catchment areas (100.000–650.000 residents).

**Results:** The ESMS revealed large differences in service availability and utilization. E.g. concerning acute residential services there is a range of 76,6 (Wrocław) – 679,4 places/100.000 residents (Dresden), for non-acute residential services the results differ between 42, (Dresden) – 125,7 places (Wrocław); the number of service users of non-acute day & structured activity services varies from 345 (Prague) – 768,2/100.000 residents (Dresden).

**Conclusion:** Reflections of the developmental stage of the regional service system on conceptualisation of day hospitals are discussed.

### P10.06

Structural and procedural characteristics of psychiatric day hospitals in Eastern and Western European countries

T. Kallert<sup>1</sup>\*, M. Schützwohl<sup>1</sup>, C. Matthes<sup>1</sup>, D. Borosova<sup>2</sup>, A. Howardova<sup>3</sup>, A. Okine<sup>4</sup>, J. Rymaszewska<sup>5</sup>. <sup>1</sup>*Department of Psychiatry & Psychotherapy, Technical University of Dresden, Germany*  
<sup>2</sup>*Psychiatricka nemocnica Michalovce, Slovak Republic*  
<sup>3</sup>*Charles University, Prague, Czech Republic*  
<sup>4</sup>*Queen Mary & Westfield College, London, UK*  
<sup>5</sup>*Akademia Medyczna we Wrocław, Poland*

**Objectives:** Within the last decades, partial hospitalisation has been a key element of most modern psychiatric services. However, the concept of partial hospitalisation has always been subjected to great changes. As regards the current situation in the Eastern European countries, the reorganisation of the mental health care system is still ongoing, and the establishment of day hospitals is an important part of this process. As regards the current situation in the Western European countries, especially the aim of lowering the costs of treatment is leading to rethinking the main function of day hospitals and to establishing day hospitals acting as an alternative to inpatient treatment for patients with acute disorders. In respect of

this background, the presentation describes and compares structural and procedural characteristics of psychiatric day hospitals in the Czech Republic, Germany, Poland, the Slovak Republic, and the UK.

**Methods:** Data will have been assessed in 2001 and 2002 by a postal survey using a self-developed 15-item questionnaire.

**Conclusion:** Results will be discussed and future steps concerning the development of partial hospitalisation will be derived from.

## P11. Depressive disorders

### P11.01

Immune-receptor-endocrine interactions in the pathophysiology of major depression

S. Minenko. *Institute of Experimental Neurology and Psychiatry, Kharkov, Ukraine*

The role of the Adrenergic and Benzodiazepine receptors in development of immunosuppression on leukocyte-pyruvate dehydrogenase activity was studied in 60 patients with primary major depressive episode. Investigation included administration of  $\alpha$ -adrenergic "receptor" drug L-DOPA and benzodiazepine "receptor" drug-DIASEPAM before dexamethazone immunosuppression test (DIST). In cases of primary major depressive episode in separation with an anxiety disorder (30 patients – comparison subjects) after L-DOPA and Diasepam administration activity of leukocyte-pyruvate dehydrogenase increased more than 25 %. DIASEPAM of a long dose had a higher immunosuppressive effect than L-DOPA (0,5 g) on alteration of leukocyte-pyruvate dehydrogenase effect than L-DOPA (0,5 g) on alteration of leukocyte-pyruvate dehydrogenase activity (more than 5 mmol/l/hour,  $p < 0,05$ ). DIASEPAM immunosuppressive action did not correlate with positive dynamics of T-and-B-cells lymphocytes. From other side, mechanism of L-DOPA action on adrenergic receptors stimulated T-cell receptors and made them hyperactive (produced increasing range of T-cell lymphocytes). It means that adrenergic and benzodiazepine receptors are interacting with each other and influencing T-and-B-cells receptors in different ways during immunosuppression. Finally, it is important to study immune-receptor-endocrine interactions and major depression.

### P11.02

The role of depression in early psychological rehabilitation in patients with CHD

M. Kowalska\*, J. Tylka, I. Korzeniowska-Kubacka, K. Leszczynska, M. Stepnowska. *National Institute of Cardiology, Warsaw, Poland*

**Aim of study:** The assessment; the influence of intensity of depression in patients after coronary by-pass surgery on the course of primary cardiac rehabilitation (hospital phase) and relation between depression and self-ego picture (particularly as an intensity of psychical needs chosen by patients).

**Material and methods:** 30 men (age between 45–62,  $x = 50,3$ ) after coronary disease operation (first class NYHA) In study were used: Beck's Scale of Depression; Adjective Check List – H.G.Gough, A.B.Heilbrun; Patients were examined twice (in the beginning and end of two weeks early cardiac hospital rehabilitation)

**Results:** During first days of cardiac rehabilitation 46% patients appeared depressive reactions (manifested low or medium intensity of them). After hospital phase was observed percentage depressed

patients (to 37%). There are not quantitative differences in depressing reaction among patients in the beginning and ending bimonthly rehabilitation. But there are qualitative differences in manifested symptoms. The analysis of results indicates – there is a high, an adverse correlation between heightened intensity of depression and psychological needs: dominance, achievement ( $r = -0.64$ ).

**Conclusions:** 1. Rehabilitation has a strong influence on debilitation of depressive symptoms. 2. Traits of personality, which can have an influence of retained symptoms of depression are: stronger dominance, achievement and endurance needs. 3. In the course of psychological rehabilitation (of cardiac patients) is necessary to interact on emotional state (symptom of depression) and also form traits of personality (to make stronger some of them), particularly these traits, which can have an influence on auto-regulation of psychosomatic processes among rehabilitated patients.

### P11.03

Current comorbidity of DSM-IV MDD in the Vantaa Depression Study

T.K. Melartin\*, H.J. Rytysala, U.S. Leskela, P.S. Lestela-Mielonen, T.P. Sokero, E.T. Isometsa. *National Public Health Institute, Helsinki, Finland*

**Background:** While numerous studies have documented the high comorbidity of major depressive disorder (MDD) with individual mental disorders, no published study has reported overall current comorbidity with all axis I and II disorders among psychiatric patients with MDD, nor systematically investigated variations in comorbidity by sociodemographic factors, inpatient vs. outpatient status, and number of lifetime depressive episodes.

**Method:** Psychiatric outpatients and inpatients of Vantaa city, Finland, were prospectively screened for an episode of DSM-IV MDD. Thereby 269 patients with a new episode of MDD were enrolled in the Vantaa Depression MDD Cohort Study. Overall comorbidity was assessed via semi-structured SCAN 2.0 and SCID-II interviews.

**Results:** The great majority (79%) of patients with MDD suffered from one or more current comorbid mental disorder, including anxiety disorder (57%), alcohol use disorder (25%), and personality disorder (44%). Anxiety disorders had specific associations with axis II clusters and inpatient status. The prevalence of personality and/or substance use disorders varied with gender, in- vs. outpatient status, number of lifetime depressive episodes and type of residential area.

**Conclusion:** Most psychiatric patients with MDD suffer from at least one current comorbid disorder. Comorbid disorders are associated not only with other comorbid disorders, but also with socio-demographic factors, in- vs. outpatient status, and lifetime number of depressive episodes. The influence of these variations on current comorbidity patterns among MDD patients need to be taken into account of in- treatment facilities.

### P11.04

Parental separation at birth and depression in adulthood

J. Veijola\*, P. Maki, M. Joukamaa, H. Hakko, M. Isohanni. *Department of Psychiatry, University of Oulu, Finland*

**Objective:** Early separation of a child from the mother has been considered as a risk factor for developing later depression.

**Method:** The index cohort consisted of 3020 subjects born in 1945–1965 in Finland and isolated from their family due to tuberculosis in the family into special nurseries, the Christmas Seal Homes immediately after the birth. The average separation

time was seven months. The subjects being alive at January 1, 1971 were identified. For every index subject two reference subjects were chosen; the matching criteria being sex, year of birth and place of birth. The data on depression was obtained from Finnish Hospital Discharge Register by the end of year 1998.

**Results:** Of the male index subjects 4.2 % and 2.6 % of the reference subjects had been treated in hospital due to depressive episode. In females the respective figures were 3.9 % for index subjects and 3.6 % for reference subjects.

**Conclusion:** Maybe the early separation from the mother had unfavourable effects on later psychological development in some of the subjects.

### P11.05

Prolactin secretion in response to haloperidol challenge in delusional and non-delusional depression

L. Lykouras\*, M. Markianos, J. Hatzimanolis, P. Oulis, G.N. Christodoulou. *University of Athens, Department of Psychiatry Clinical and Research Center of Affective Disorders, "Eginition" Hospital, Athens, Greece*

Certain studies on measures related to central neurotransmitter activity have demonstrated that in delusional (psychotic) depression there is a dopaminergic dysregulation which distinguishes it from non-psychotic depression. A neuroendocrinological method to check the degree of DA receptor responsivity is by measuring the prolactin responses to acute intra-muscular administration of haloperidol. We studied this possibility by applying the haloperidol test in seven delusional and ten non-delusional depressed patients. All patients met DSM-IV criteria for major depressive episode, single or recurrent, with or without psychotic features. After a 3-week washout period, 5mg haloperidol were injected i.m. and blood samples were taken at 0, 30, 60, 90 and 120 minutes. In both trials, significant time effects were observed (elevated prolactin levels,  $F=11.36$ ,  $p=0.000$ ). However, the prolactin responses to haloperidol did not differ significantly between the two patient groups ( $F=0.12$ ,  $p=0.97$ ). These data do not show a difference in  $D_2$  receptor responsivity at least at the hypothalamus-pituitary level, between psychotic and non-psychotic depression.

### P11.06

Mitochondrial function in selected major depressive disorder patients

A. Gardner<sup>1</sup>\*, A. Johansson<sup>2</sup>, R. Wibom<sup>2</sup>, I. Nennesmo<sup>3</sup>, U. von Döbeln<sup>2</sup>, L. Hagenfeldt<sup>2</sup>, I. Hällström<sup>1</sup>. <sup>1</sup>*Karolinska Institutet, NEUROTEC Department;* <sup>2</sup>*Karolinska Institutet, Department of Medical Laboratory Sciences and Technology;* <sup>3</sup>*Karolinska Institutet, Division of Pathology, Microbiology, And Immunology, Stockholm, Sweden*

**Objective:** To investigate muscle mitochondrial functions in patients with chronic subsyndromal depression with interspersed major depressive disorder episodes and audiological, ocular, and muscular symptoms. Increased occurrence of several physical conditions has been reported in patients with depressive disorders, and various physical conditions and depressive disorder in patients with mitochondrial disorders. Mitochondrial disorders may be due to mutations in nuclear or mitochondrial DNA (mtDNA) and cause impaired production of adenosine triphosphate (ATP), cellular energy.

**Methods:** Investigations of mitochondrial ATP production rate (MAPR with eight assessments), mitochondrial enzyme activities, long-PCR technique to detect mtDNA deletions, and muscle cell