

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