2,47). We compared 3 groups: 1. MDD without comorbidity (N=147), 2. MDD with comorbidity (no ADHD) (N=249), 3. MDD with ADHD with/without other comorbidity (N=87). Diagnoses were determined by semi-structured interview, quality of life was measured by self-report and parental report. Groups were compared by ANOVA, post hoc comparisons were done in cases of significant differences.

**Results:** The MDD with ADHD group differed from the others in gender distribution, younger age at onset of depression, more frequent hospitalization and/or outpatient treatment. Child reported QL was not different among the groups. Parent reported QL was the highest in the MDD without comorbidity group, somewhat decreased in the MDD with comorbidity group and lowest in the MDD and ADHD group.

**Conclusions:** ADHD worsens the course of MDD in children and adolescents. Quality of life of depressed children decreases further by additional comorbidity, but ADHD has the most negative effect in parents' opinion. It is important to ask both parent and child in examining QL of children.

### P045

Duloxetine increases stage 3 sleep and suppresses rapid eye movement (REM) sleep in patients with major depression

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**Background and aims:** Sleep studies in patients with major depression receiving the new selective norepinephrine and serotonin reuptake inhibitor (SNRI) duloxetine are lacking.

**Methods:** Polysomnography in 10 patients with major depression (7 males,  $39.9 \pm 7.6$  years, HAMD-21 score:  $23.6 \pm 5.6$ ) was recorded twice, before and after 7-14 days of treatment with duloxetine.

**Results:** A significant (p < 0.01) increase from baseline to endpoint was found for amount of stage 3 sleep (21.0  $\pm$  10.7 to 37.4  $\pm$  20.1 minutes) and REM latency (58.5  $\pm$  31.1 to 193.6  $\pm$  72.6 minutes). Amount of REM sleep significantly (p < 0.01) decreased from 94.8  $\pm$  34.5 to 51.5  $\pm$  42.5 minutes.

**Conclusions:** These results partly differ from those in healthy subjects receiving duloxetine.

## P046

Stress hormones and anabolic balance in depression: Influence of antidepressants.

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**Objectives:** Some researchers suppose that cortisol/DHEAS ratio is an important markers of anabolic balance.

The aim of the study was to investigate cortisol, DHEAS and cortisol/DHEAS ratio in depressed patients with antidepressant treatment.

**Methods:** There were examined 39 patients with depressive episode (F 32.2). Patients in the first group (n=25) had antidepressant treatment of tianeptine during three weeks in the average dose of 37,5 mg per day. Patients in the second group (n=14) had treatment of sertraline in the average dose of 50 mg per day. Depressive symptoms were evaluated by the Hamilton Depression Scale (HDS). Blood samples were drawn two times: before antidepressant treatment, and

on 21 day of the treatment. Serum DHEAS and cortisol levels were measured using immune-enzyme method.

**Results:** There was a negative correlation between DHEAS level and score by the HDS before treatment (rs = -0,47, p=0,037). Cortisol/DHEAS ratio in patients after tianeptine treatment was significantly low than before treatment (accordingly 258 and 394, P=0,002). In patients under sertraline treatment these differences were also significant (accordingly 339 and 419, p=0,04), but after tianeptine treatment cortisol/DHEAS ratio was significantly low than after sertraline treatment (accordingly 258 and 339, p=0,003). Decrease in the cortisol/DHEAS ratio was correlated with improvement of depressive symptoms, measured by HDS (rs = 0,42, p=0,045).

**Conclusions:** Our results demonstrate that antidepressants influence on anabolic balance in depression, decreasing cortisol/DHEAS ratio. The influence of the tianeptine on cortisol/DHEAS ratio is marked more than sertraline.

### P047

Role of psychological suitability factors in the choice between short and long-term therapy for treatment of depressive and anxiety disorders

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Patient's pre-treatment personality characteristics and interpersonal predispositions are known to predict outcome of psychotherapy. In order to choose an optimal treatment it is essential to know which of these psychological suitability factors predict different outcome in short and long-term therapy. In the Helsinki Psychotherapy Study the role of suitability factors between short-term and long-term therapies was studied.

A total of 326 outpatients aged 20-46 years and suffering from depressive or anxiety disorders were randomly assigned to short-term therapy (short-term psychodynamic psychotherapy or solution-focused therapy combined) or long-term psychodynamic psychotherapy and were followed for 3 years. Psychiatric symptoms were assessed with the Symptom Check List, Global Severity Index (SCL-90-GSI) and psychological suitability factors with a 7-item suitability assessment scale.

Patients with good or moderate values of psychological suitability factors gained more from short-term than from long-term therapy during the first year of follow-up. Among patients with poor values of certain suitability factors, long-term therapy appeared more effective than short-term therapy during the third year of follow-up. When combining two individual suitability factors four patient groups could be found: patients who gained faster from short-term therapies, patients who gained equally from both short and long-term therapies, patients who gained only from long-term therapies, and those who gained neither from short nor long-term therapy.

Patients with good or moderate values of suitability factors can be successfully treated with short-term therapy, whereas patients with poor values need long-term therapy or some other treatment to recover. More research is needed to verify these findings.

# P048

Depressive symptoms and sport activity among college students

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**Background and aims:** To assess the prevalence of depressive symptoms among college students and to find out whether sport activity have any influence on decreasing the depression score.

**Methods:** The authors screened all 664 first year college students. There were 466 females and 178 males. They answered The Beck Depression Inventory (BDI) and questionnaire about their sport activity (non active, recreational and active in sports). For the purpose of the analysis depressive symptoms were defined as a score > 11. We used Chi-square and Mann-Whitney test.

**Results:** 9,2% of the students have shown significant depressive symptoms. Statistically significant lower score on BDI have had the students who are active in sports compared with the recreational group and in correlation to the group of students not active in sports. In the group of the active ones in sports there are only 5,5% of them with depressive symptoms, while in the group of non active in sports there are 18% of them depressive. In separate analysis we have not found correlation of decreasing depressive symptoms and sport activity among males, but we have found that sport activity has a significant effect among females. Females are statistically more depressed (10, 5%) than males (5%).

**Conclusion:** Our results have shown moderate values of depression symptoms among college population. More females than males have experienced depressive symptoms. While sport activity have not shown significant influence on the depression among males, it has shown significant influence in reducing the depressive symptoms among females.

#### P049

Effect of pallidotomy on depression in patients with Parkinson's disease

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**Background and aims:** The goal of the present paper is to assess whether pallidotomy influences the degree of depression in Parkinson disease patients (PD). The prevalence of depression in PD patients has been reported to range from 45% to 50%. Deep depression is observed in 7% of patients. Previous data suggested that several factors can determine depression in PD patients. It is assumed that psychological factors, neurotransmitter dysfunctions (i.e. dopaminergic, serotoninergic and noradrenergic disease), and basal ganglia lesions may lead to depression.

**Methods:** The emotional state of 30 patients (16 women, 14 men) with PD was examined with depression tests: the Beck Depression Inventory and the Montgomery Asberg Depression Rating Scale twice - three days before and three days after pallidotomy. The age-matched control group was tested twice within a week.

**Results:** The difference in the degree of depression before and after surgery was significant. Statistically significant difference in the degree of depression between healthy individuals and PD patients before pallidotomy was reported (p=0,07). Moreover, the results obtained after pallidotomy in the experimental group did not reveal

any differences with the control group. It was noticed that sex has significantly influenced the degree of depression as measured before and after surgery with both tests.

Conclusion: The results obtained in the study showed that stereotactic pallidotomy reduced depression symptoms in PD patients. This finding is compatible with Lauerbach's model, according to which ablation or deep medial globus pallidus stimulation should inhibit thalamic and cortical activity, thus reducing depression symptoms.

#### P050

Depression and self-esteem in adolescence:a study of senior high school students in Greece

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**Background and aims:** The evaluation of depressive symptomatology and self-esteem in high school adolescent students in Greece and the assessment of their relation to demographic variables, school performance and adolescents' activities.

**Methods:** The CES-D Scale (depressive symptomatology) and the Rosenberg scale (self-esteem) were administered to 713 students (396 girls and 317 boys, age 15-18), of the Athens Metropolitan Area, Senior's High School Grades 1-3. Personal data such as age, sex, school records, family's conditions and time spent per week in school-related (e.g. tutorials) and extracurricular (e.g. sports) activities were collected.

**Results:** Considering CES-D cut-off score >28, 26.2% of the students (33.7% of females and 16.1% of males) could be considered as having depression. CES-D score was found to be associated to sex and school record (being less for students with a better record). Male students were having higher depression scores as they grew older, while respective scores for females were decreasing; at third grade boys had slightly higher CES-D mean score than girls.

Self-esteem and depressive symptoms were negatively correlated among both boys and girls.

Conclusions: A relatively high number of adolescent students in Greek schools can be considered as having significant depressive symptomatology and low self-esteem. The higher depression score in girls is consistent with the existing literature. The fact that boys have higher depression scores in the last grade of high school may be an indication of the higher pressure for academic achievement imposed by the family on them.

## P051

Prophylaxis in bipolar disorder: Implications of a randomised, open lamotrigine-vs-lithium study

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**Background and aims:** In 2 drug approval studies lamotrigine has been shown to possess prophylactic potentials comparable with lithium in bipolar disorder. However, the generalisabilty of these results are limited. In 2001, an investigator-driven study was initiated comparing lamotrigine and lithium for prophylaxis aiming at mimicking routine clinical conditions. Data collection is not completed (until