

Posters, Sunday 5 March 2006

Poster session 1: Alzheimer disease and dementia.

P1

Gender, community support and functionality of psychogeriatric ward inmates

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Objective: In the research the relationship between gender, received community support and mental state and level of self-dependence in hospitalised inmates over 65 years old was analyzed.

Method: There were 76 persons (34 males, 42 females) hospitalized on the psychogeriatric ward because of depression and cognitive dysfunctions (patients with dementia of medium and profound degree were excluded).

Patients were examined on admission to the hospital, after 4 and 10 weeks of hospitalization.

In the analysis detailed interview and GDI, ADL, IADL and the Norbeck Social support Questionnaire (NSSQ) were used.

Results: Among women more frequent and more profound depressive disorders were observed

- Among women living with children there was much higher lowering of ambience than among women living with spouse or alone.
- No significant differences in physical function between men and women were found.
- Regardless of gender patients receiving high emotional support and average instrumental support were characterized by the best psychophysical function and the fastest regression of depressive symptoms. This group of patients reported the highest satisfaction of life.
- Regardless of gender the worst parameters of psychosocial function and the slowest improvement of psychical state were observed among patients receiving high or no instrumental support and simultaneously no emotional support.

Conclusion: On the basis of this study the type of received social support seems to be better predictor of good psychophysical function in older patients than gender.

P2

ApoE genotype and effects of Exelon therapy in Alzheimer's disease

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Introduction: Association between ApoE4 genotype and cholinergic deficit was shown by J. Poirier (1994). ApoE4 is suspected to contribute to AD pathogenesis and to be associated with more dramatic progression of AD (Rogaev E.I., 1999). This study is aimed to assess correlation between ApoE4(+/-) genotypes and response to cholinergic therapy (Exelon, rivastigmine) in AD.

Patients and methods: Thirty patients with mild/moderate AD were enrolled and received Exelon in daily doses 3–12 mg. Efficacy measures included CGI, MMSE, ADAS-cog, IADL. Total duration of therapy was 16 weeks, patients were assessed five times. Patients were additionally examined in 8 weeks after treatment discontinuation.

Results: The relationship between presence/absence of ε4 allele and response to Exelon was analyzed. Patients were considered as responders if they had moderate or major improvement in CGI scale and four points and over (>4) improvement in ADAS-cog. Seven (23.3%) patients treated with Exelon were assessed as responders. However, among the ApoE4(+) patients the proportion of responders was higher (31.2%) than among ApoE4(-) patients (14.3%).

Conclusion: These data suggest that proportion of responders to Exelon (≥4 points improvement in ADAS-cog and moderate or major improvement in CGI) is 2 times higher in ApoE4(+) than in ApoE4(-) patients with mild/moderate AD.

P3

Effects of combined therapy with western medicine and eastern herb medication on dementia-clinical trials

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Background: Vascular dementia (VD) is very difficult to treat in nowadays. So we adopted eastern herb medicine in treatment of VD. The aim of this study was to detect any efficacy in combined therapy with western medicine and eastern herb medicine on VD. Forty patients who met criteria for probable VD according to the National Institute of

Neurological Disorders and Stroke and the Association Internationale pour la Recherche et l'Enseignement en Neurosciences (NINDS-AIREN), were included in this study. The half of patient was treated with western medicine (WM group) and the other half of patient with combined western and eastern herb medicine (CM group) for 12 weeks. These two groups were matched for age, sex, education, and severities of dementia. All patients underwent the Seoul Neuropsychological Screening Battery (SNSB), Barthel index (BI), clinical dementia rating (CDR) and family satisfaction score. We investigated effect of treatment before and after treatment. Patients with CM group showed greater improvement in attention and frontal executive functions ($P < 0.05$) than WM group. Otherwise, no significant between-group differences were found in BI and CDR. However family satisfaction scores were increased in CM group after 12 weeks treatment. Combined medicine is more effective in abnormal behaviour of VD patient and patient is more easily treated by other family.

P4

Glutamate dehydrogenase activity at neuroexcitotoxic glutamate development

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As most important excitatory neurotransmitter is glutamate present in high concentrations in central nervous system. Glutamate dehydrogenase (GLDH) is intracellular enzyme normally located in mitochondria of all cells, mainly in tissues rich with mitochondrial matrix. Gene for GLDH1, mostly to be found in leukocytes and brain, is located on chromosome 10 and gene for GLDH2, most is in hepatocytes, on chromosome X.

Metabolism of neuroexcitotoxic glutamate is altered in certain forms of neurological and psychiatric diseases (olivopontocerebellar atrophy, atypical Parkinson's and Alzheimer diseases). These patients have lower GLDH1 activity (up to 40%) in leukocytes and astrocytic processes, what may cause defective metabolism of transmitter glutamate at nerve terminals, leading to accumulation of glutamate and degeneration of postsynaptic neurons.

Defining GLDH activity in leukocytes can give us indirect data about neurodegenerative processes in brain, thus we developed our own method.

GLDH activity has been researched on leukocytes of 115 healthy subjects—29 female and 86 male—aged 18–65. Mean catalytic activity was by 24.67% higher in men (0.86 $\mu\text{kat/g}$) than in women (0.69 $\mu\text{kat/g}$), highest values discovered in under 30-year-old patients. GLDH activity decreases slower in the age-group 30–50, yet evidently more rapidly afterwards, particularly in men where activity drops to 0.33 $\mu\text{kat/g}$, whereas in women to 0.45 $\mu\text{kat/g}$. It is possible to conclude that lower glutamate dehydrogenase activity in leukocytes and brain may be one of key factors for neurodegenerative ageing processes.

P5

Does perfusion CT enable differentiating Alzheimer's disease from vascular dementia and mixed dementia? A preliminary report

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Background and aims: In recent years the imaging methods have played an increasing role in diagnosing and differentiating dementive disorders. CT perfusion (pCT) of the brain is widely available method

which until now has been used almost exclusively in cerebral ischemic lesions.

The purpose of the study was to evaluate usefulness of pCT in differentiating Alzheimer's disease (AD) from vascular dementia (VAD) and mixed dementia (MixD).

Methods: pCT was performed in 30 patients (mean age: 66.8 years): 17 with AD, seven with VAD and six with MixD. Regional perfusion parameters (CBF, CBV and MTT) were calculated from 31 region-of-interest (ROIs) in the gray and white matter of the frontal and temporal lobes, basal ganglia and internal capsules bilaterally. The obtained data for the subgroups of AD, VAD and MixD patients were compared statistically.

Results: rCBF and rCBV values in most of the ROIs (20/31) and 23/31, respectively) in the gray and white matter of the bilateral frontal and temporal lobes were significantly lower in the AD patients compared with the VAD subgroups ($P < 0.05$). In 19 ROIs of the AD patients decreased values of both CBF and CBV parameters were found. No statistically significant differences in rCBF and rCBV in the basal ganglia and internal capsules nor in rCBV in bilateral temporal white matter were found between the AD and MixD patients and between patients with VAD and MixD.

Conclusion: pCT may be a valuable method of distinguishing between AD and VAD on the basis of rCBF and rCBV values.

However, it seems to be of little significance in differentiating AD from MixD and MixD from VAD.

P6

Depressive prodromal syndrome in Alzheimer's disease (AD) clinical and pharmacological correlations

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Premises: Ethio-pathogenetic mechanisms of AD have multiple involvements and neurodegenerative factors develop concomitant to the collapse of the acetylcholinergic transmission efficiency.

Depressive disorder is often signaled before the release of AD.

It is univocally accepted that approximately 50% of the patients with middle cognitive impairment (MCI) develop an AD.

Material and method: We examined a group of 28 male patients, aged between 66 and 70 years, which presented MCI (MMSE = 17–24) and were found in the last 2 years at Mental Health Center with depressive disorder treated with Fluvoxamine, medium dose 100 mg/day (14 patients) or Amitriptyline—medium dose 75 mg/day (14 patients).

Active follow-up of the whole group during 12 months showed that 12 patients had diagnosis criteria for AD. We observed that, from the Fluvoxamine group, only three patients developed AD (21.4%), while in the Amitriptyline group, AD was diagnosed at nine patients (64.3%).

The following step was to administer Donepezil 10 mg/day at the patients diagnosed with AD and to estimate the improvement using the ADAS-COG scale.

It was highlighted that improvement was significantly faster and superior in the patients treated with Fluvoxamine.

Preliminary conclusions:

1. The association depressive syndrome—MCI may be a risk factor for AD.

2. The therapy of prodromal depressive syndrome with tricyclic antidepressants hurries the onset of AD more than treatment with Fluvoxamine.

3. Therapeutical response at Donepezil seems to be influenced by previous antidepressants; patients treated with Fluvoxamine (without cholinergic effects) had a superior therapeutical response.

P7

Quetiapine versus risperidone in elderly patients with behavioural and psychological symptoms of dementia (BPSD): efficacy, safety and cognitive function

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Objective: To directly compare quetiapine and risperidone in elderly patients with BPSD.

Methods: Eight-week, investigator-blinded, randomised study of 72 outpatients (55–85 years) with BPSD who received flexibly-dosed quetiapine (50–400 mg/day) or risperidone (0.5–2 mg/day). Primary efficacy variable: Neuropsychiatric Inventory (NPI) Parts I, and II (sum of scores). Secondary endpoints included Mini-Mental State Examination (MMSE), extrapyramidal symptoms (EPS; Simpson-Angus Scale [SAS]) and adverse events (AEs).

Statistical methodology: Friedman tests (within groups) and Mann–Whitney *U*-tests (between groups) [significance at $P < 0.05$].

Results: Sixty-nine out of 72 patients were considered evaluable (three patients were outside inclusion criteria), four patients discontinued (three due to AEs: quetiapine [2], risperidone [1]; one lost to follow-up); 65 patients received quetiapine ($n = 34$; mean dose 77 ± 40 mg/day) or risperidone ($n = 31$; mean dose 0.9 ± 0.3 mg/day). NPI scores improved significantly from baseline to Week 8 with quetiapine (Part I, 25.56–17.52; Part II, 30.17–27.73) and risperidone (Part I, 25.74–16.58; Part II, 30.30–26.71) [all $P < 0.05$ vs. baseline], with no significant differences between groups. MMSE scores remained stable from baseline to Week 8 with quetiapine (18.50–18.47) and risperidone (18.00–18.65). Both treatment groups were similar on safety measures, including EPS (measured using the SAS). 57.9% and 44.1% of quetiapine- and risperidone-treated patients, respectively, experienced mild or moderate AEs. Four patients experienced serious AEs (quetiapine, 3; risperidone, 1); none were considered treatment-related. There were no cerebrovascular AEs or deaths.

Conclusions: Both treatments were equally effective against BPSD in elderly outpatients, were well tolerated and did not impair cognition.

P8

Occupational therapy in care homes for older people

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Background: In the UK a high proportion of older people in residential homes have depression, many also have dementia. They and their relatives frequently perceive a need for higher levels of occupation, but homes are seldom equipped to provide more than

essential care. Moreover, memory problems can rule out conventional hobbies or other self-directed activities. This study set out to investigate whether a structured programme of intensive occupational therapy (OT) would improve depression levels in residents.

Method: This RCT was clustered at the level of the home, with four intervention and four control homes in northern England. In each intervention home a qualified occupational therapist worked full time for 1 year; participants received an individualised programme, including individual and group activities. The primary outcome measure, the Geriatric Mental State: Depression Scale, was obtained for 143 participants. Secondary outcomes included dependency in activities of daily living, quality of life, services used outside the home and costs of the intervention.

Results: The intervention, intensive OT, was innovative in this setting, and we report how it was implemented. Its net cost was 24 euros per person per week. There was no improvement in depression despite positive qualitative responses. Participation in the intervention was associated with higher social services costs.

Conclusion: The study findings are counter-intuitive. The discussion will focus on the methodological issues raised for research in this field. We will also consider appropriate service level responses in the face of contradictory qualitative and quantitative data.

Poster session 1: Antidepressants

P9

Antidepressant prescription by aviators: clinical and ethical discussion

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Depressive disorders are rare among aviators. They need dynamic and relational approach, sometimes prescription of antidepressants. In aeronautical environment, these psychotropics are generally prohibited because of their impacts on psychomotor performance and so on air traffic safety.

The main objective of this communication is to determine how to manage depressed pilots who choose to fly, with or without medications.

Methods: We propose a clinical and ethical discussion based on new studies, european and american aeromedical regulations and on our experience in an aeromedical center in Paris.

Results: Self or chronic medication intakes are probably underestimated. According to current data, some selective serotonin reuptake inhibitors have very few aeromedically significant side effects.

Conclusions: The modern and international aeromedical practices are reassessing this absolute prohibition. They propose a carefully controlled follow-up of depressive aircrew taking antidepressant by selected psychiatrists. They may fly safety and effectively with or as a co-pilot.

Every practitioner must keep in mind that any mood complaint or any behavioural demonstration among an aircrew member must be analysed according to traditional medical references but also according to those of the aeronautical profession. No model of understanding can realize subtle interactions between the pilot's history, his/her personality, this special physiological environment and the physician with new therapeutical perspectives.

P10

Efficacy and safety of mirtazapine in partial responsive depression in the elderly

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Background: Mirtazapine and tianeptine are efficient and safe options in the treatment of depressive disorders. Nevertheless, the treatment of depressive disorder in the elderly remained a partial solved issue. The important co-morbidity, the co-medication (complex somatic conditions) and the psychological problems make difficult this therapy. Our study used mirtazapine as orally disintegrated tablets (ODT) and tianeptine.

The aim of this study is to estimate the clinical efficacy and acceptability of mirtazapine ODT alone versus augmentation, in partial responders after treatment with tianeptine.

Methods: This clinical open study included 120 patients (65–80 years), both sexes, with MDD (DSM-IV), mean MADRS scores 28, at baseline. We began with 8 weeks of tianeptine (12.5 mg per BID). After this period, we evaluated: 44 responders (MADRS < 50% vs. baseline), five drop-outs, 71 partial responders (MADRS < 30% vs. baseline). We divided 71 patients in two groups: "A": augmentation tianeptine + mirtazapine ($N = 34$) and "B" switch: mirtazapine ($N = 37$), 8 weeks. Instruments: depression (MADRS), anxiety (HAMA), CGI, side effects, somatic conditions and relapse (follow-up: 6 months).

Results: After 8 weeks, 21 patients from "A" group were responders; eight partial/non-responders, five drop-outs. In group "B": 30 responders, four partial/non-responders, three drop-outs.

Conclusions: 1. In partial responders, the switch formula seems to be a better solution, due to the good acceptability of mirtazapine ODT. 2. If it is possible, in elderly, the long term treatment must use fewer drugs. 3. The safety difference between groups was non-significant.

P11

Patient-perceived differences among commonly used antidepressants: a web-based survey

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Background: Lethargy, a complaint among many individuals with depression, impairs the ability to accomplish both cognitive and physical tasks, as well as interest in social interaction. The Motivation and Energy Inventory-Short Form (MEI-SF), a validated instrument, assesses these related aspects of patient vitality. The goals of this study were to identify antidepressants that might be particularly effective for lethargic depressed patients and to gather normative data for the MEI-SF.

Methods: A web-based survey was administered to a total of 594 individuals diagnosed with depression: 245 taking a serotonergic agent, 115 taking Wellbutrin XL, and 234 not currently being treated with an antidepressant, as well as 252 individuals without any history of psychiatric problems. The survey questionnaire addressed patient vitality using the MEI-SF and a series of additional items, as well as a variety of clinical and demographic characteristics.

Results: While not statistically significant, average MEI-SF scores for patients taking Wellbutrin XL were somewhat higher than those for patients taking a serotonergic agent. In addition, when asked in a series of questions to compare their current energy levels, productivity, and physical aches and pain to those before they started taking their current antidepressant, patients on Wellbutrin XL reported significantly more

improvement than patients taking serotonergic agents ($P < 0.05$). Results also suggested that respondents diagnosed with depression but not currently taking an antidepressant were experiencing only mild symptoms.

Conclusions: These findings suggest that treatment with Wellbutrin XL may be of particular benefit to patients with lethargic depression.

P12

Trazodone and ejaculatory inhibition

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Introduction: Sexual side effects of psychotropics are often not reported spontaneously and require specific questioning. Religious patients have increased difficulty addressing these adverse effects. Though frequently associated with SSRIs, these may not be the offending agent but rather may confound intervention when a complex patient is being treated with rational polypharmacy as occurred in this case.

Method: Case analysis with literature review.

Results: Forty-year-old male with bipolar rapid cycling disorder presented with wife to discuss sexual dysfunction. After initiation of trazodone during a 6/05 hospitalization, he developed progressive ejaculatory inhibition over the course of 4 months, including decreased emission with masturbation. The patient and wife described his having normal erections but inability to ejaculate over 30-min periods of sexual interactions making them both feel inadequate. He denied priapisms since initiating trazodone. His psychotropic regimen was: fluoxetine 40 mg qam, divalproex sodium 1500 mg total daily dose, lamotrigine 200 mg qam, trazodone 100 mg qhs, and clonazepam 0.5 mg bid PRN. The logical offending agent was fluoxetine; however, he had been on such for 5-year without any sexual dysfunction. Though trazodone is most often associated with priapism, limited literature suggests association with ejaculatory inhibition. Forty-eight hours after discontinuation of trazodone, the patient and wife had normal sexual relations that have continued thereafter.

Conclusion: This patient delayed reporting sexual dysfunction until impacting the marriage. The presence of polypharmacy necessitated obtaining a clear time-line of all adverse effects associated with the addition of different psychotropics. Though trazodone is most commonly associated with priapism, it can also cause ejaculatory inhibition.

P13

Efficacy of citrus aurantium in the treatment of major depressive disorder

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Background: To assess the efficacy of one of the herbal products (citrus aurantium) in the treatment of patients with major depressive disorder (MDD).

Method: Seventy seven outpatients, with MDD (according to the Diagnostic and Statistical Manual of Mental Disorders, 4th. edition (DSM-IV) received imipramine (75–150 mg/day) or citrus aurantium, as orange concentrated water (30–60 drops per day) randomly. The cases followed by clinical interview and Beck Depression Inventory (BDI) for 12 weeks.

Results: Both of the two groups showed significant decrease in clinical global assessment for improvement and Beck score at week 12, and there were no significant differences between them.

Conclusion: It seems that both imipramine and citrus aurantium are able to ameliorate depressive symptoms, but due to some methodological limitations these findings must interpret cautiously.

P14

Effect of 50 mg of trazodone on human melatonin secretion

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Objective: To study the effect of an antidepressant with hypnotic properties, trazodone, on melatonin secretion in human beings.

Method: Three healthy subjects participated in the study. Participants took orally one externally identical capsule, containing placebo or 50 mg of trazodone at 22 hours in a double blind crossover design. The study was carried out during 2 days separated. Blood samples were extracted at 22, 23, 24, 1, 2 and 12 hours. Melatonin was assayed by ELISA techniques. Melatonin levels on the placebo and trazodone conditions were compared by non parametric paired *t*-test.

Results: Mean melatonin level (pg/ml) \pm standard deviation for each time was as follows: placebo vs. trazodone 22 hours 10.18 \pm 4.18 vs. 17.34 \pm 7.47, placebo vs. trazodone 23 hours 18.03 \pm 9.14 vs. 20.46 \pm 9.74, placebo vs. trazodone 24 hours 18.09 \pm 6.92 vs. 23.34 \pm 11.21, placebo vs. trazodone 1 hour 22.00 \pm 3.64 vs. 43.12 \pm 18.72, placebo vs. trazodone 2 hours 35.46 \pm 23.20 vs. 28.91 \pm 10.43, placebo vs. trazodone 12 hours 8.05 \pm 3.39 vs. 8.90 \pm 0.78.

Conclusion: Fifty milligrams of trazodone taken at 22 hours increases melatonin secretion at night.

P15

Refractory pain-depression syndrome treated with tianeptine

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Chronic pain is strongly associated with anxiety and depression symptoms in advanced cancer patients. The comorbidity of pain and depression greatly difficult symptom control and seems to create a noxious feedback mechanism in which uncontrolled pain predispose to depression lowering the capacity to cope with pain. We call this feedback circle as pain-depression syndrome. Mr. R.A., is a 68-year-old male Caucasian. At the age of 66 an advanced prostate adenocarcinoma was diagnosed, and radiotherapy was initiated. Multiple bone metastases were concomitantly found. A mild bone pain was treated with paracetamol. After a year, the pain worsened and tenoxicam 20 mg/day was added, but the pain became more severe. We initially treated the pain with 400 mg/day of tramadol with partial response switched to morphine. A major depressive episode (DSM-IV-TR) associated with chronic pain syndrome (Clinical Global Impression-GGI, severity = 5) was diagnosed. He was prescribed with 75 mg/day of amitriptyline, at which dose he experienced severe anticholinergic side effects and mild confusion. Then amitriptyline was thus halted, and he was prescribed with tianeptine 12.5 mg three times a day. After a 2-week period he described a remarkable improvement of pain control (seven to three using the analogue visual scale of pain), mood, anxiety and depressive symptoms were also improved (CGI severity = 2; CGI improvement = 1). At 6 months follow-up he had very mild pain complaints and no significant mood symptoms. His

quality of life had improved greatly and he has also returned to many of his daily activities.

P16

Ropinirole augmentation in resistant bipolar and unipolar depression: 48 weeks follow-up

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Background and aims: Up to 50–60% of depressed patients could be treatment-resistant with available medications, making of treatment resistant depression (TRD) a major clinical challenge. The aim of the present study is to evaluate long-term antidepressant safety and response to adjunctive ropinirole (RPN) in TRD.

Methods: The study is a 48-week, prospective, open trial of patients (mean age 51 years) with bipolar ($n = 6$) and unipolar ($n = 9$) depression (DSM-IV). Mean duration of unmodified antidepressant treatment prior to RPN augmentation is 6 weeks. RPN is added at flexible doses from 0.25 mg/day at bedtime up to 1.4 mg/day by the second week. Severity of depression is assessed by MADRS, CGI-S and CGI-I scales. Drug safety is evaluated with DOTES. The LIFE scale is administered at baseline of the acute trial, at weeks 16, 32 and 48. Patients are evaluated in terms of sustained remission and recurrence of depressive episodes.

Results: DSM-IV criteria for remission were fulfilled by 7 of 15 (46.7%) patients. Among remitted patients, six of seven (85.7%) recovered during the acute phase within 9 weeks from the introduction of RPN. All remitters maintained mood stabilization without recurrence during the follow-up. Median duration of treatment with ropinirole was 10 weeks for patients who did not remit and 48 weeks for patients who met criteria for remission. After the acute phase of treatment no adverse events and no hypo/manic switch episodes occurred.

Conclusions: Our data seem to suggest that ropinirole augmentation could be a worthwhile strategy of treatment of TRD patients.

P17

The efficiency of SSRI (selective serotonin reuptake inhibitors) in late life depression

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Objective: The study aimed to evaluate the efficiency of SSRIs, namely Ciprallex in late life depression's treatment.

Methods: The study was conducted on 60 patients hospitalized in the Psychiatric Clinic of Arad, during January 2004: February 2005. The 60 patients were diagnosed with first severe or moderate depressive episode or unipolar major depressive disorder. The diagnosis was established on DSM-IV-TR and ICD-10 operational criteria.

The research was conducted comparatively by dividing the patients into two groups: group A consisting of 30 patients which followed treatment with SSRIs (Ciprallex 10–20 mg/day) and group B of the other 30 patients which followed treatment with TCAs (amitriptyline 150–200 mg/day).

The depression's severity has been evaluated with Hamilton Rating Scale for Depression. The evaluation of the patients has been done at admission, after 3 weeks and after 6 months of evolution the treatment.

Results: The evolution of the depressive episodes of the patients of group A, that were undergoing Ciprallex treatment, was considerably better than of those in group B.

The average of the statistical Hamilton Scores reveals a real improvement in group A (19.8) in comparison to group B (16.2).

In group A (39.98%) the values of the therapeutic answer are definitely better than those in group B (25.79%), and so was the clinical evolution.

Conclusion: The evolution of the patients treated with Cipralext was better.

In both groups, the evolution was favorable after 3 weeks of treatment, but after 6 months of therapy is a lot better in group A.

P18

Antidepressants and suicide: what is the cause of the growing discrepancy between real and trial practice?

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As suicidal behaviour in mood disorder patients occurs almost exclusively in the context of major depressive episode or dysphoric mania but practically never during euthymia, to treat major mood episodes effectively and to stabilize the euthymia is crucial for suicide prevention in this population. In fact, some large-scale, naturalistic, observational, long-term clinical follow-up studies (including mostly severely ill, frequently suicidal depressive inpatients) show that compared to no treatment, the risk of suicidal behaviour of patients on long-term medication is two to eightfold lower [1]. However, the meta-analyses of phases 2–3 RCTs on patients with nonpsychotic, nonsuicidal unipolar major depression show almost double frequency of suicidal behaviour of patients on antidepressants compared to those on placebo [3]. This is in sharp contrast with the 2–8 fold reduction of suicidal risk among treated vs. untreated mostly severely ill depressives, reported in open clinical trials, mentioned above.

The possible explanation of this contradiction might be that in contrast to „officially” diagnosed Bipolar I and II depressives as well as actively suicidal/psychotic depressives, subthreshold bipolar/bipolar spectrum patients are not excluded from the RCTs on “unipolar” major depression, and as we have learnt recently, antidepressant monotherapy (unprotected by mood stabilizers) can induce/worsen depressive mixed states (and thus provoke aggressive/suicidal behaviour) in subthreshold bipolar and bipolar spectrum depressives [2].

References

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P19

Reboxetine augmentation in resistant depression to selective serotonin reuptake inhibitors, venlafaxine and mirtazapine

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Objective: To evaluate efficacy of the combination therapy with two antidepressants from different pharmacological families in treatment-resistant depressive patients.

Methods: In this prospective 12 weeks open-label study, we assessed the effectiveness of the addition of reboxetine to 195

depressive patients that had previously not responded, or had done so only in a partial way, to conventional treatment, in monotherapy, with selective serotonin reuptake inhibitors (SSRIs) (fluoxetine $n = 29$; paroxetine $n = 44$; sertraline $n = 30$; citalopram $n = 38$), venlafaxine ($n = 40$) or mirtazapine ($n = 14$). Data were analyzed on an intent-to-treat basis, using the last-observation-carried-forward (LOCF) method.

Results: Mean decrease on the 21-items Hamilton Depression Rating Scale (HDRS) score was 58.02%, and on the Clinical Global Impressions Scale (CGI), 63.41%. At the end of the treatment, 78.7% of the patients were evaluated as improvement (CGI < 4), 42.6% as responders (HDRS \leq 50%) and 33% in remission (HDRS \leq 10). No serious side effects were observed during combination therapy, being more frequent increased constipation (8.5%) and dry mouth (5.3%).

Conclusions: The results of this study show that the strategy of combination with reboxetine may be an effective and well-tolerated tool in treatment-resistant patients who have failed to adequately respond to monotherapy with SSRIs, venlafaxine or mirtazapine.

P20

Trends in antidepressants use in different European Union countries

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Objective: To describe the pattern of use of antidepressant drugs in some of the European Union countries from different geographic areas (South, Center and North Europe): Spain, France, Italy, Germany, United Kingdom and Sweden.

Method: Consumption data of each pharmaceutical speciality have been obtained from IMS Health (International Marketing Services) December 2002. The usage data are expressed in DHD, corresponding to the defined daily dose (DDD) for 1000 inhabitants and day.

Results: The total consumption of antidepressants during 2002 was very similar among Spain (43.15 DHD), France (43.61 DHD) and United Kingdom (44.85 DHD), being considerably surpassed by Sweden (60.83 DHD). Lower antidepressants consumption was observed in Italy (22.21 DHD) and Germany (19.86 DHD). In all the analyzed countries, the selective serotonin reuptake inhibitors (SSRI) were the most consumed drugs, Germany excepted, where the tricyclic antidepressants (TCAs) were more usually consumed. In France, Italy and Sweden the monoaminooxidase inhibitors (MAOIs) are not available and in France reboxetine and nefazodone are not either available. France is the European country with a higher consumption of “second generation” antidepressants (5.18 DHD).

Conclusion: There are remarkable differences, among the studied European countries in total antidepressants consumption, as well as in antidepressants used standard, in spite of the fact that the SSRI constitute the most used antidepressant group in all the countries, Germany excepted, where the ADTs are the most consumed. Sweden is the country with a higher consumption of antidepressants (60.8 DHD).

P21

The influence of 5-HTTLPR and STIN2 polymorphisms in the serotonin transporter gene on treatment effect of selective serotonin reuptake inhibitors in depressive patients

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Background: Serotonin transporter gene (SLC6A4) variations have been proposed as explanation for inter-individual differences in selective serotonin reuptake inhibitors (SSRIs) effects. Quantitative assessment of genetic influences is necessary to evaluate whether genetic testing prior to antidepressant prescription would lead to earlier treatment effects. This study evaluates the influence of two polymorphisms (5-HTTLPR and STin2) on SSRI treatment outcome in depression.

Methods: We included 50 SSRI non-responders (cases) and 164 referents meeting DSM-IV criteria for major depression and using an SSRI for at least 6 weeks. Blood samples or buccal swabs were gathered to determine 5-HTTLPR and STin2 genotypes. The association between genotype and SSRI response was assessed by use of logistic regression.

Results: Patients with the 5-HTTLPR s-allele had a non-significantly increased risk of SSRI non-response; odds ratio (OR) 1.60 (95%-CI: 0.66–3.89). 5-HTTLPR effects were strongest in female patients (OR 3.54, 95%-CI: 1.05–11.92), for male patients 5-HTTLPR seemed to have no effect (OR 0.29 (95%-CI 0.04–2.34). An age-dependent effect of 5-HTTLPR was observed; patients under 44 years old had an increased non-response risk (OR 9.34, 95%-CI 1.41–61.98). STin2 genotype had no clear influence on treatment outcome.

Conclusions: Our findings indicate that women with the 5-HTTLPR s-allele have a less favourable response to SSRI treatment. To our knowledge, this is the first time that a gender-dependent influence of 5-HTTLPR is reported. More research is needed, particularly in subgroups of patients, before implementation of genetic testing can be recommended.

P22

High venlafaxine serum levels in psychiatric inpatients: reasons for treatment discontinuation and frequency of dose adjustments

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Background and aims: For venlafaxine, a therapeutic range of 195–400 ng/ml (venlafaxine plus its active metabolite *O*-desmethylvenlafaxine) has been suggested. The aim of the study was to evaluate serum levels in an inpatient setting and to analyze dose adjustments regarding levels above the recommended range.

Methods: Between January 2003 and July 2005 all 74 venlafaxine serum level measurements that were requested in a psychiatric hospital were analyzed retrospectively.

Results: In 53 inpatients (median age 47.6 years, 67.9% women, 32.1% men) at least one measurement of venlafaxine serum levels had been performed. The dose range was 75–450 mg/day (median 300 mg/day), 32 patients (60.4%) were treated with \geq 300 mg/day. Twelve of 53 initial results (22.6%) were within the recommended range, seven (13.2%) were lower and 34 (64.2%, median 657 ng/ml) higher. Within 6 weeks after initial measurement of serum levels venlafaxine was discontinued in nine cases (17.0%). Reasons for discontinuation were adverse drug reactions (six with a median level of 244 ng/ml) and insufficient response (three with a median level of 416 ng/ml). 28 of the 34 patients (82.4%) with levels > 400 ng/ml were discharged while venlafaxine therapy continued. The dose had been decreased in 10 (35.7%), maintained in 10 (35.7%) and increased in 8 (28.6%) of these cases.

Conclusions: Low discontinuation rate and high rate of maintenance or even increase of the dose in patients with venlafaxine

serum levels > 400 ng/ml might indicate good tolerability and a therapeutic benefit due to higher serum levels.

P23

The effectiveness of tianeptine in the treatment of depression

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Objective: Tianeptine has its specific place in the number of antidepressants. It combines both antidepressive and anxiolytic effects, has remarkable acceptability, the possibility to combine with other drugs, absence of undesirable side effects. The main task was to estimate the effectiveness of Tianeptine in the treatment of patients with depressive disorders.

Methods: The clinical peculiarities of Tianeptine were studied in the patients with depressive disorders who have applied to the Centre of Mental Health “Stress”. We used mini-checklist HAM-D, checklist of Hopkins and scale SCL-90 for the estimation of the patient’s conditions.

Results: The antidepressive therapy with Tianeptine was effective in 21 of 30 patients (about 70%) by the end of the investigation. In nine more patients (30%) the depression was on the level of easy one (according to HAM-D). According to Hopkins depression had not been revealed in 25 patients (83.3%) by the end of therapy, and the signs of anxiety had not been seen in 27 patients (90%). Tianeptine reduced the severity of depression (for 55.4% according to HAM-D, for 60% according to SCL-90 and for 57% according to Hopkins) and anxiety (for 54.5% according to Hopkins and for 57% according to SCL-90).

Conclusions: Tianeptine reduces the severity of depressive and anxious disorders, possesses more expressive antidepressive and sedative as well as some less expressive stimulating activity. It allows to refer it to the “balanced” antidepressants, and what’s more the antidepressive action of the drug is leaving behind sedative action.

P24

Relationship between CYP2D6 metabolic status and sexual dysfunction in antidepressant treatment

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Sexual dysfunction is an often-discussed side effect of psychotropics, especially with antidepressant therapy. It is an important part of quality of life and when it lasts during long-term administration of antidepressants, it becomes a major problem that can lead to treatment discontinuation.

The aim of this preliminary study was to find the degree in which sexual dysfunction occurs in depressed inpatients treated with antidepressants and assess if there was a link with CYP2D6 genetic polymorphism and its metabolic capacity.

The study included 12 inpatients with a diagnosis of an episode of depressive disorder.

Clinical measures included Hamilton Depression Rating Scale and sexual functions were monitored according to Arizona Sexual Experience Scale.

Patients were CYP2D6 genotyped and phenotyped.

Evaluations were conducted before (D0) and 30 days after treatment (D30).

Results show impaired sexual function in all patients without significant difference between D0 and D30 (ASEX D0 mean score: 22.18; D30 mean score: 20.27).

Seven patients (64%) were found with EM genotype (*1/*1) and four (36%) with PM genotype (*1/*3 or *4).

Nine patients expressed EM phenotype (MR < 0.3) and two patients expressed PM phenotype (MR > 0.3).

Sexual function improved in some patients and this was significantly correlated with the metabolic ratio. Patients with RM > 0.3 were indeed markedly improved in their sexual functions.

There was no correlation between sexual dysfunction and reduced CYP2D6 capacity.

Metabolic capacity is important to take into account when prescribing psychotropics in order to improve tolerance of these drugs and to improve patients' quality of life.

Poster session 1: Anxiety disorders

P25

The management of patients with chronic post-traumatic stress disorder and comorbid chronic pain

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Background and aims: Recent research suggests that chronic post-traumatic stress disorder (PTSD) and chronic pain frequently co-occur and that similar mechanisms may exist for maintaining both conditions. Also, treatment of PTSD without managing chronic pain or vice versa can cause chronic suffering in patients and frustrations in physicians.

The authors analysed the management of patients with chronic combat related PTSD and chronic pain syndrome.

Methods: The 200 patients with chronic combat-related PTSD and chronic pain who were treated at the Osijek University Hospital during year 2005, were selected as the sample for this study. On the base of psychiatric interviews, medical records and self reported questionnaires the authors analysed the characteristics of PTSD and comorbid chronic pain, as well as the therapeutical approaches that were used in the treatment of those patients.

Results: Combat veterans with PTSD reported in descending order back pain, headache pain, limb pain and chest pain. Anxiety and depression were highly correlated to pain. The most effective management of both disorders was multidisciplinary approach with the joint assessment and treatment of patients by psychiatrist and anaesthesiologist. All patients were treated with psychotropic drugs as well as with analgesics, and some of them with psychotherapeutical interventions.

Conclusion: Rational polypharmacy is essential in the management of chronic PTSD with comorbid chronic pain, and should be individually tailored to the specific need of the patient. The optimal management of patients with chronic PTSD and chronic pain requires holistic approach in the multidisciplinary assessment and treatment.

P26

Neuroendocrine basis of gastrointestinal manifestations in anxiety disorders

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Background: The characterization of corticotrophin-releasing factor (CRF) and CRF receptors and the development of specific CRF

receptor antagonists selective for the CRF receptor subtypes have led to the understanding of the biochemical coding of stress-related alterations of gut motor function in anxiety.

Materials and methods: This non-systematic review presents the authors' selection of studies related to the CRF family of neuropeptides.

Results: Irritable Bowel Syndrome, Inflammatory Bowel Disease and anxiety disorders are conditions with common symptoms deriving from the gastrointestinal tract and it is well established that they are induced by psychological and stressful stimuli. It is known that brain CRF is involved in the cross-talk between the brain and the gastrointestinal system because systemic or central administration of CRF agents delays gastric emptying while stimulating colonic motor activity. Endogenous CRF in the brain plays a role in mediating various forms of stressor-induced gastric stasis, including postoperative gastric ileus, and activates colonic transit and faecal excretion elicited by psychologically aversive or fearful stimuli. Furthermore, recent studies indicate that peripheral CRF-related mechanisms also contribute to the mediation of stress-related alterations in gut motility. It seems that CRF2 receptors are responsible for the inhibition of gastric emptying by CRF, a centrally mediated effect, whereas the anxiogenic colonic motor responses may involve peripheral CRF1 receptors.

Discussion: The CRF system characterization may be promising for significant advances in our understanding of these disorders and will contribute to the development of novel and more effective prophylactic and/or therapeutic approaches.

P27

Prevalence of psychiatric disorders in primary care using the Spanish version of patient health questionnaire

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Background and aims: The Patient Health Questionnaire (PHQ) has been translated and validated into Spanish with general hospital inpatients but it has not yet been used in Primary Care. The aim was to measure the prevalence of psychiatric disorders in Primary Care using the Spanish version of the PHQ, a self-report diagnostic tool.

Methods: A random sample of 190 primary care attendees aged 18–65 was selected from three PC Centres in the area of Madrid (Spain). Of them, 187 (98.9%) completed the Spanish version of PHQ, and other questionnaires included in the protocol. Subthreshold or minor disorders were included in the study (minor depression, subthreshold panic disorder, anxiety not otherwise specified) and we defined mixed anxiety and depressive disorder (MADD) as the co-occurrence of minor depression plus anxiety NOS.

Results: Forty-three (23%) patients had any DSM-IV disorder and 32 (17.1%) patients were suffering only a subthreshold condition. Major depressive disorder was the most prevalent diagnosis (15.5%) followed by generalized anxiety disorder (11.2%). According to our criteria used seven (3.7%) patients had a MADD and 26 (13.7%) patients had a comorbid major depression with any anxiety disorder.

Conclusions: The Spanish version of PHQ appears to be a good and suitable tool for screening and diagnosing psychiatric disorders in primary care. The rates found are similar to others rates reported using more time-spending questionnaires and interviews.

P28

The importance of anxiety for psychiatry and psychotherapy

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Anxiety is described as an archaic feeling or state pertaining to human life. Religious, historical and philosophical aspects are mentioned, emphasizing the increased sensitivity of modern man to anxiety, but also the increased tendency to repress it. Anxiety, argues the author, is a basic part of every psychiatric illness, but its manifestations are very different, ranging from severe symptoms to socially accepted “strategies”. Psychodynamically, pathological anxiety is linked to early neglect and traumatization, and is always accompanied by contact disturbances and the feeling of inner loneliness. Finally, the association of anxiety with aggression and its implications for therapy are discussed.

P29

Psychological, personality characteristics and somatoform pain disorder of adolescents

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Objectives: To study the differences in levels of alexithymia, depression, anxiety, and socioeconomic status (SES), the method of family conflict resolution between a sample of adolescents diagnosed with ICD-10 Persistent Somatoform Pain Disorder and healthy adolescent controls.

Methods: Using the Toronto Alexithymia Scale (TAS-20), the Hospital Anxiety and Depression Scale (HADS), we investigated the point-prevalence of alexithymia, anxiety, and depression of somatizing adolescents (aged 14 to 17, $N = 120$) and a healthy control group of adolescents (aged 14–17, $N = 240$) randomly selected from six schools in Lithuania. A original questionnaire was administered to the subjects and their parents to assess each family’s SES and method of conflict resolution.

Results: The rate of alexithymia in somatizing adolescents was 69.2%, which was significantly higher than in healthy controls (22.9%, $P < 0.001$). The rate of anxiety was significantly higher in the somatizers (61.6%) versus controls (23.3%, $P < 0.001$). The rate of depression was low in both group. Somatizing adolescents generally came from families of higher SES (52.5%) as compared to healthy controls (6.3%, $P < 0.001$). The method of conflict resolution in the families of somatizing adolescents was more often by quarreling or fighting (44.1%), silence or not solving the problem at all (26.7%), and rarely by discussion (17.6%).

Conclusions: Somatizing adolescents have higher levels of alexithymia, anxiety, and SES compared to healthy adolescent. The two groups did not significantly differ on the level of depression. Dysfunctional family communication and conflict resolution may thus be a proposed target of early intervention in somatizing adolescents.

P30

Structure of affective components of the somatoform disorders

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Objectives: Identification of the mechanisms, caused by feature structure of affective components of the somatoform disorders.

Methods: We surveyed 222 patients with following disorders; F-32.8, F-40.01, F-41.1, F-45.0, F-45.2, F-45.31, F-45.4, F-45.8. Researching was held according diagnostically indicates of ICD-10.

Methods of researching clinical, clinic-quantitative, inventory of the clinic-behavioral markers of feeling of guilty.

Results: Feeling of guilty for disorders; F-40.01, F-41.1; 2.5 ± 0.65 ($P < 0.01$), F-32.8; 4.7 ± 0.38 ($P < 0.01$), F-45.0, F-45.2, F-45.31, F-45.4, F-45.8; 4.9 ± 0.50 ($P < 0.01$), has tendency to increased.

Clinic-behavioral markers of feeling of guilty are one from mechanisms of conversion affective components caused by initiation correlative comorbidity of depressive and anxiety disorders, anxiety and somatizing disorders.

Factor of correlative comorbidity somatizing affective disorders caused by the level of complicated caused by hard—identification of defects to emotional sphere.

Conclusions: Feeling of guilty and variants his transformation in structure somatizing affective components is get significant diagnostic-pathogenically role in development and fiction affective somatizing. In the time of, especially transformation feeling of guilty, is determining of features clinical appearance of phenomena somatizing.

Distinguished mechanisms of the somatizing affective disorders (clinic-behavioral markers of feeling of guilty) can considerable as target of directive intervention.

P31

Panic disorder and somatic illnesses

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Objective: The aim of this study was to indicate on the most common somatic illnesses in patients with panic disorder with agoraphobia and to estimate possible association between panic disorder with agoraphobia and somatic illnesses.

Method: The participants in this study were 93 patients with primary DSM IV diagnosis of panic disorder with agoraphobia and 48 control subjects without psychiatric diagnosis. The presences of somatic illnesses were ascertained from the modified National Institute of Mental Health Panic Questionnaire (NIMH PQ), where the patients and control subjects answered on the questions about presence of specified somatic illnesses. Results: The most common somatic syndromes in the group of panic disorder patients were hypertension, hypotension, hyperthyroidism, constipation, and hypoglycaemia. Concerning somatic illnesses, in the sample of panic disorder patients most frequent were cardiovascular (61.3%), gastrointestinal (25.8%), endocrinology (19.4%) and urology (17.2%) illnesses. Comparing to control group, psychiatric healthy subjects, patients with panic disorder with agoraphobia have had statistically significant higher rate of cardiovascular (chi square = 9.40, $P < 0.01$) and endocrinology (chi square = 19.31, $P < 0.01$) illnesses.

Conclusion: The overall results of the study indicate that: 1. There is a high level of comorbidity between panic disorder with agoraphobia and somatic illnesses. 2. Cardiovascular diseases was the most common illnesses in patients with panic disorder with agoraphobia. 3. Cardiovascular and endocrine illnesses have had statistically significant higher rate in the patients than in the control group.

P32

Poststroke anxiety disorders: clinical features, predictors, neuroimaging

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Background: Generalized poststroke anxiety disorders (GPAD) is one of the important and often unrecognized sequela of stroke.

Purpose: The purpose of the study was the assessment of anxiety disorders prevalence after stroke at acute stage, clinical and neuroradiological correlation and association with poststroke depression.

Patients/methods: A prospective study of 294 stroke patients were conducted. Stroke severity was assessed by NIHSS. CT/MRI were performed. Diagnosis of GPAD was performed according to DSM-IV: presence of a sustained worrying state associated with at least three anxiety symptoms (including restlessness, decreased energy, difficulties in concentration, irritability, muscle tension, and sleep disturbance). Depressive symptoms were assessed by Hamilton Depression Scale Patients were divided in three groups: I - patients with GPAD, II - patients with poststroke depression (PD) and III - patients with GPAD and poststroke depression. MMSE and ADL index were recorded.

Different statistical tests were performed by SPSS.

Conclusion/discussion: From 294 stroke patients 57 (19.3%) patients had GPAD, 96 (32.6%) PD, and 34 (11.5%) GPAD + PD. Group I patients more often had damage of the left hemisphere, prevalence of ischemic with cortical lesion. Group II patients had no found lateralized effect, but in the acute stage correlated with thalamic stroke, group III patients revealed prevalence of left cortical lesion.

Multiple linear logistic regression analysis revealed a significant share of hypertension, age, previous history of stroke and female gender in the development of GPAD. Comparison of these three groups revealed that group III patients had a lower MMSE, higher NIHSS score, and worse ADL index.

P33

Anxiety among nurses and the related factors

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Nursing is a challenging and stressful job. It is known that workload, shift work, emergencies, infectious diseases, lack of family and social supports are causes of anxiety and stress.

The main goal of the present study is to investigate the level of anxiety and its relation to some factors among nurses working at Imam Khomeini Educational Hospital, Tehran, Iran. The Spielberger Anxiety inventory (state-trait) was used for measuring the level of anxiety. A self-administered questionnaire containing various items was used to gather the required data. The response variable is the level of nurse's anxiety and the independent variables are the nurse's job satisfaction, job stress, drug consumption, emotional mood, family support, and demographic information. Non-parametric statistical tests are used for analyzing the data. The results of the study showed that among 39 nurses 48.78% are suffering from severe anxiety, while 67% have job satisfaction. In this study the statistical significant relations are found between level of anxiety with drug consumption ($P = 0.000$), emotional mood ($P = 0.003$), work load ($P = 0.002$), working at emergency ward ($P = 0.000$), psychological work climate (0.009), salary and payment (0.001). The results suggest that social support and psychological climate of nursing work should be improved.

P34

Time experience in panic disorder

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Background: Several data suggest that particular symptoms in selected subgroups of panic patients may show marked diurnal changes.

Objectives: The study aims to record the period of the day with most frequent panic attacks, the presence and echo of nocturnal panic, the duration of onset, peak and extinction of a panic attack.

Methods: The study was performed on 56 subjects, diagnosed respecting the ICD-10 criteria. Subjects reported the temporal occurrence of their symptoms, the subjective lengths of a panic attack. Independent measurements done on several subjects were performed in order to register the objective time span of a panic attack and the temporal dissection within the distinct phases.

Results: Panic symptoms develop gradually during 2–5 min, reach the peak with duration of 2–10 min and decrease slowly in 5–7 min. Concerning the diurnal occurrence, most subjects reported frequent panic attacks in the morning and early afternoon, with a gradual tapering in the intensity and frequency as the day progresses. 21.42% of the subjects experiment nocturnal panic attacks. The objective measurements revealed shorter panic attacks than the reported ones.

Conclusions: Anxious symptoms develop gradually during 2–5 min; reach the paroxysm that lasts 2–10 min, resented as longer due to the terrifying emotional impact. The discrepancies between the objective measurements and the subjective reports may be explained by the subjective time extension of negative emotions. Most panic attacks occur in the first part of the day but the nocturnal panic attacks, although more rare, are interpreted by subjects as life threatening.

P35

Childhood physical abuse and clinical features in adults with panic disorder

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Introduction: The relation between childhood trauma and anxiety disorders is well known.

Specifically, physical and sexual abuse is consistently linked with panic attacks and panic disorder in adulthood.

In addition, past childhood abuse seems to be associated with greater severity of panic disorder.

The objectives of this study were to examine the prevalence of self-reported childhood physical abuse in adult patients with panic disorder and its clinical implications.

Methods: We conducted a retrospective evaluation of childhood physical abuse in adults with a primary diagnose of panic disorder (DSM-IV).

Ninety-three patients (63 women and 30 men) answered the Sexual and Physical Abuse Questionnaire (SPAQ). The mean age was 33.7 years.

Analysis of the data: Non-parametric tests (*U* Mann–Whitney).

Results: Thirty percent of the 93 patients gave a positive answer to at least one of the questions about physical abuse. Women reported

physical abuse as frequently as men. Women were younger than men at the moment they were victims of physical abuse.

History of abuse was associated with clinical severity at the $P < 0.05$ level.

Those with high punctuations in STAI-S and STAI-T, Millon-borderline, Millon-hysterical and Millon-passive-aggressive were significantly more likely to have a history of physical abuse.

We did not find an association between physical abuse and agoraphobia or response to treatment.

Conclusion: Our results are congruent with previous clinical studies that have suggested elevated rates of physical abuse amongst patients with panic disorder. History of abuse implies more severity and other clinical features.

P36

Generalized anxiety disorder: a 40 years follow-up study

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Background: There is insufficient knowledge of the long-term course of generalized anxiety disorder. We studied the course of this disorder in patients who were followed up for 40 years.

Methods: Patients admitted with the diagnosis of anxiety states ('anxious thymopathy') to the Lopez Ibor Neuropsychiatric Research Institute between 1950 and 1961 were examined by an experienced psychiatrist using a semistructured interview between 1984 and 1988 ($n = 65$). The diagnosis of generalized anxiety disorder (GAD) was made according to DSM-III-R criteria. A re-examination was performed by the same psychiatrist in the period 1997–2001 ($N = 59$). Mean length of follow-up from onset was 47 years.

Results: Improvement was observed in 83%. Among those who recovered, 95% had done so already by the 1980s. GAD disappeared from 50 but was replaced by somatization disorders. Lack of regular compliance, female and onset of GAD before age 25, were variables associated with worse outcome. Undifferentiated somatization disorder was the most prevalent clinical status at follow-up.

Conclusion: After several decades, participants improve of GAD, though most continue to have somatizations.

P37

The rate of anxiety among pregnant women and the influencing factors

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Aims: Pregnancy is a critical condition in women's life. Pregnant women experience anxiety and agitation due to various reason like changes in social and family roles, worry about their and fetal health status. Anxiety in pregnant women threatened their physical and psychological health status. Taking into account the importance of maintaining and promoting mothers and fetal health status, and due to limited performed studies in Iran in this literature, the present study was conducted.

Material and methods: In current study, 188 randomly selected samples among pregnant woman referred to health care centers in Kashan in 2003 were studied. A questionnaire was used for obtaining data. In addition to performing SCL 90 anxiety test, some questions like; trimester of pregnancy, importance of fetal sex, wanted or unwanted pregnancy and parity were propounded. To achieve the aims, χ^2 (k square) test was used in addition to descriptive analysis.

Results: Finding demonstrated% 17.02 of samples were in good health, % 34.04 experienced borderline anxiety and % 48.94 had severe anxiety. Also statistical tests showed that there was significant relationship between anxiety with importance of fetal sex and the trimester of pregnancy, but no significant relations were found between anxiety with wanted pregnancy and parity.

Conclusion: Given that nearly half of pregnant women suffered from anxiety and considering the consequences of anxiety in pregnant womem, it is necessary for health care providers to recognize susceptible pregnant women and then plan some remedies to mitigate their anxiety.

P38

Panic disorders in the structure of alcoholic withdrawal symptoms

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In this research there is an observation of genesis of panic disorders alcoholics in the abstinent period. For the period of 2002–2004 64 male alcoholics age 23–45 were investigated. They had their first panic disorder during an alcoholic abstinence. That panic disorder has required an urgent home visiting service. Common for all patients was the following: duration of alcoholic dependence over 5 years, the use of strong alcoholic drinks, duration of the continuous use of alcohol up to the moment of development of panic disorder more than 3 days. Panic disorders arose on a background of various vegetative abnormalities in the abstinent period and a franc fear of dying or development of a heart attack or a stroke, feeling of anxiety. Therapeutic actions as the ordinary parenteral injections of Diazepam 10–20 mg, in a combination with Obzidanum 40 mg have given short-team effect till 4–5 hours. Frequency of repeated attacks reached two to three times within 3 days. The most effective solution was a realization of a detoxication in a combination with Diazepam up to 40 mg/day, with the subsequent purpose of sedative traditional neuroleptics within 3–4 days (in the present research Promazin in a doze of 75 mg/day was prescribed). After the completion of an abstinence with panic disorders a part of patients (12%) stopped reception of alcohol, 88% of patients considerably reduced a doze of the use of alcohol for the period till 6 months.

P39

Integrated treatments for panic disorder: 3 years follow up study

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Backgrounds: Several study confirm the complexity of panic disorder etiopathogenesis: neurobiological vulnerability, psychological sensitivity, psychological conflicts undergoing panic attacks. This data suggest that an integrated therapeutic strategy is effective in reducing the panic symptoms, avoidances and psychological vulnerability to panic.

Objective: The present study examined the efficacy of an integrated model of treatment, including pharmacotherapy, Group Behaviour Therapy and a Psychodynamic Psychotherapy, to reduce panic symptoms, avoidances and number of recoveries improving social, relational and working function.

Method: For the study we recruited 80 patients with panic disorders, with or without agoraphobia (DSM IV criteria). After a clinical and instrumental diagnostic assessment, these patients started the therapeutic programme with pharmacological therapy and CBT group and received the suggestion for psychodynamic therapy, but

some of them didn't begin this session of therapy, and they received regular follow up for pharmacotherapy and CBT.

The protocol planned an outcome follow up, with clinical interviews and questionnaires (Ham-A, Ham-D, MSPS, PAAAS, SF36), at months 6, 12, 24, and 36.

Results: In this study we analyze the results of this model of treatment during 3 years follow up. We compare the data of integrated Therapy Group with the CBT and Pharmacotherapy group.

The integrated treatment seems to be similar to the other combined therapy during the first year and only during the third year it seems to become more effective than the other combined approach reducing relapses, maintaining the results and improving the quality of life.

Poster session 1: Eating disorders

P40

Psychotherapeutic and psychopharmacologic opportunities in the treatment of bulimic nervosa symptomatology—a case report

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The aim of the study is to present the therapeutic opportunities and to constitute a plausibility model of psychotherapeutic treatment in correlation of the individual characteristics of personality, familiar dysfunctionality and actual adverse social influences.

Material and methods: One case of female patient with bulimic-anorectic symptomatology, in structure anorexia, on the age of 24 years was presented. This case presents a therapeutic outcome after psychotherapeutic and psychopharmacological treatment in duration of 3-month period of termination of bulimic-anorectic symptomatology MMPI 201-self-disclosed technique for estimating important dimension of the personality, profile index of emotion (PIE)-test for the personality. TNS test of nonfinished sentences, HAMD, eating attitude test, eating related characteristics questionnaire (ECQ) Mehrabian A. Eating disorder inventory (EDI), family inventory of life events and changes (FILE), Shenan scale for disabilities, Cornell index, genogram (McGoldrik and Gerson), directed clinical interview.

Results: After 3 months psychotherapeutically and psychopharmacological treatment giving out of the hospital the patient has been treated with tabl. Fluoxetine a 20 mg, 60 mg/day and tabl. Alprazolam 30 min before each meal. Psychotherapeutically cognitive behavior therapy is being given to correction of negative attitude for themselves and their body there was completely diminished of the BA symptomatology for this period.

P41

The dominant role of 5-HT_{2C} receptors in pathophysiology and proper treatment of eating disorders

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Of particular importance are bulimic patients, who appear to overconsume carbohydrate in all but their largest meals. Much interest has been generated by the possible effects of serotonergic drugs on feeding behavior and macronutrient selection. However, there is no current evidence that any specific 5-HT receptor subtype mediates the abnormalities of the macronutrient intake exhibited by these patients.

The findings in animals may have implications for understanding human brain mechanisms of appetite control, which appear some similarities in their responsiveness to serotonergic stimulation.

In this food-deprivation experimental protocol employing male Wistar rats, our results indicate that mesulergine, a serotonin (5-HT) antagonist at 5-HT_{2C} sites and dopamine D₂ agonist, leads to food intake and diet selection by a dual mode of action: due to the simultaneous antiserotonergic and dopaminergic activity causes hyperphagia, which goes in parallel with an increase in carbohydrate and protein intake, respectively.

It is also suggested that the activation of 5-HT_{2C} receptors, mainly located in medial hypothalamus, may be involved in both protein sparing and carbohydrate suppressing effects of 5-HT (m-CPP-like effect). On the contrary, an important role in increase of protein consumption seems to possess the dopaminergic system probably through D₂ receptors (apomorphine-like and mesulergine-like effect, respectively).

In conclusion, hypothalamic 5-HT_{2C} receptors play a dominant, not the exclusive, role in food intake and diet selection. These findings extend our understanding on neurobiological substrate of appetite and contribute to the studies related to new drugs against obesity, especially those referred to 5-HT_{2C} compounds with agonistic properties.

P42

Comparison of the electrodermal reaction on odours used as emotional stimulus between an adolescent with anorexia nervosa group and a control group

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In both clinical practice and research, eating disorders patients are reported to have difficulties in identifying and describing their emotions.

The aim of the present preliminary study is to compare the vegetative emotional response to an odour, as emotional stimulus, between a group of seven adolescents with anorexia nervosa and a group of seven healthy controls. The six odours, documented about their hedonicity and comestibility, are used as emotional stimulus. The odorants come from the Test Olfactif Clinique (Laboratoire de Neurosciences des Systèmes sensoriels, CNRS-UMR Lyon). The criterion used to compare the neurovegetative response is the electrodermal reaction. The measure of electrodermal reaction is assessed with a psychogalvanometer.

The two groups of adolescents are comparable on age, gender, social level, tobacco consumption and olfactory level. The electrodermal response observed is lower in the anorexia nervosa group versus healthy group with a significant difference ($P = 0.02$).

This difference observed in the neurophysiological arousal appears to be coherent with the emotional restriction described in clinical practice.

P43

Changes of pain perception, autonomic function and endocrine parameters during treatment of anorexia nervosa

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Background and aims: In anorexia nervosa (AN) pain thresholds have been shown to be increased, mainly in acute disease states. However, the underlying mechanisms remain unclear. It is known that thermal pain thresholds negatively correlate with decreased skin

temperature, whereas no correlation could be shown with endocrine parameters.

The autonomic nervous system is capable of influencing pain thresholds and autonomic dysfunction has been described in AN.

Therefore, it is intriguing to suggest a possible relation between elevated pain thresholds and autonomic dysfunction found in AN. Thus, the aim of our study was to examine the influence of autonomic parameters on pain perception in patients suffering from AN.

Methods: Thermal pain perception was assessed in 15 adolescent patients suffering from AN and 15 matched controls. Parameters were correlated with autonomic parameters obtained using heart rate variability and pupillometry measures, as well as with skin temperature and endocrine parameters. In order to assess the influence of therapy on these parameters, data were obtained at admission, after reaching aim weight and 6 months after reaching aim weight.

Results: Parameters of autonomic testing showed an increased parasympathetic tone. Over time only relative amplitude of pupillary light reflex showed a positive correlation to pain thresholds. Relative amplitude was shown to predict disease progression. In addition, we found a significant negative correlation between pain thresholds and FT3, even when considering skin temperature as a covariate.

Conclusion: Increased pain thresholds seen in AN are mainly associated with increased vagal tone and hypothyreotic state indicating central mechanisms.

P44

Multimodal–liaison treatment model for eating disorders

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In the Western world, for an increasing number of women, teenage girls, and even children, food has become something to be feared and, whenever possible, avoided. They are obsessed with weight, calories and food to the virtual exclusion of everything else. They suffer from an eating disorder. The presentation delineates the essential clinical characteristics of early onset anorexia nervosa. It emphasises the multifactor, bio-psycho-social etiology. All that the patients have in common is their belief that through starvation they have found the solution for the problems, stress and anxiety. In the presentation the multimodal, liaison treatment is presented. It combines cognitive-behavioural therapy, somatic treatment and family therapy. Narrative approach in systemic family therapy seems to be especially successful. The inclusion of medical and non-medical experts and the combination of therapeutic approaches enhances the diagnostic process and increases the chances of recovery.

P45

Amisulpride enhances weight gain in anorexia nervosa: a case report

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Eating disorders are disabling, unpredictable and difficult to treat. About 1% of the adolescents are concerned by anorexia nervosa. In the USA, the aggregate annual mortality for anorexia nervosa of 5.6% is 12 times higher than the annual death rate in woman age 15–24 in the general population. In many countries including France, the treatment involves a weight contract for out- and in-patients associated with a psychotherapy (either psychoanalytic or behavioral). From a biological point of view, the treatment of anorexia nervosa has not reach an international consensus since the physiopathological conditions are

still not clear. Some open-label trials have suggested that amisulpride, a benzamide neuroleptic with affinity for D2 and D3 dopamine receptors, can enhance weight gain. We report the case of a young anorectic who was hospitalised almost 2 years after the first signs of her eating disorder were observed. She underwent a personality examination (Rohrsach inkblot test) then and during her hospitalisation. Amisulpride 100 mg/day was prescribed because she did not gain weight and was still reluctant to psychotherapy. We observed a favourable evolution in the subsequent weeks (including in the Rohrsach test) before the psychotherapy was started. Amisulpride was stopped 1 month after her discharge when she had recovered a normal weight. We suggest that amisulpride is indicated in anorexia nervosa, especially when psychotic features are detected.

P46

Is anorexia nervosa a chronobiological disorder?

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Psychiatrist Louis-Victor Marcé proposed in 1854 to treat the anorectic girl by complete isolation. Since the 1960s the concept of weight-contract associated with familial separation has been fully theorized. Anyway, the physiopathology of anorexia nervosa is still not clear. We suggest that eating disorders may involve a circadian clock dysregulation. On one hand literature shows that bulimics are more impulsive and evening-oriented than normal controls, and the night-eating syndrome described by Albert Stunkard in 1958 is marked by a delay in the circadian pattern of eating that disrupts sleep. On the other hand the circadian variation of many biological variables (e.g. cortisol and blood pressure) is affected in anorexia nervosa, and it has been recently shown in rats that osteogenesis was under control of the CLOCK gene. This is relevant since osteoporosis occurs in up to 50% of the anorectics. Anamnesis often shows that daily rhythms are disrupted in eating disorders (e.g. sleep–wake cycle, rest–activity cycle, eating cycle). In our adolescent unit, the anorectic inpatient is asked since the beginning of the hospitalization to rest in bed and eat three times a day. Progressively he/she will be allowed to freely move within the unit and then outside the hospital. This is part of the weight-contract which includes a separation from family in the first weeks. We suggest that these conditions help the resynchronization of the circadian system and the recovering from anorexia.

P47

Psychological distress in mothers of anorexia nervosa patients attending a portuguese outpatient practice

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Consequences of the experience of caregiving in families of people with anorexia nervosa have been valued in order to improve standards of care and systemic interventions.

The study aimed to explore psychopathological consequences of caregiving in Portuguese families of anorexia patients, as a preliminary phase of an ongoing research.

A non-randomized sample was selected among key-relatives of anorexics attending an outpatient practice at the Eating Disorders Unit, Department of Psychiatry, Hospital de Santa Maria (Lisboa).

Exclusion criteria for patients were episodes of inpatient care in the previous month and for relatives to present a major psychiatric disorder themselves.

Besides a semistructured interview, rating instruments were the scaled General Health Questionnaire (Goldberg and Hillier, 1979) and the Experience of Caregiving Inventory (Szmukler et al., 1994).

This first subgroup of caregivers ($n = 18$) was composed of mothers of female patients with a mean age 19.3 years (range 14–32) and time since diagnosis 24 months (median). Three patients had a previous psychiatric admission.

These mothers were all living with their daughters with anorexia in the same household and most attended a support group for carers.

Six cases (33.3%) were GHQ positive, presenting different patterns of subscale scoring. All relatives presented difficulties in several areas of caregiving, contributing to general health problems. A minority valued positive experiences.

These are preliminary results which must be re-examined together with the larger sample being studied.

Nevertheless, anorexia nervosa carers seem to be a group at risk and deserve formal needs' assessments, on their own right.

P48

Diet with the soya modified by gene EPSPS CP4 leads to anxiety and aggression in rats

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Wistar rats and their posterity were fed additionally to their diet by the soya Roundup Ready (RR), which was modified by the gene EPSPS CP4. In the first series females received additionally to the diet the GM-soya flour in the special plate in their home cages 2 weeks before mating, during mating, during pregnancy and during lactation. The anxiety (model "light and dark") and aggression were analyzed in females and their posterity. The behavior of rats and young rat pups of GM-group were compared with those of control rats: with traditional soya or without any additives. Pups from GM group have higher mortality and third of them were sick and weighed several times less, than pups from the control groups. In another series the behaviour of males, which got beans of GM soya RR, during 3 months was analyzed. As in previous series the behaviour of males from GM group was compared with the behaviour of control rats. Obtained data showed a high level of anxiety and aggression in males, females and young pups from GM groups. Aggression was more expressed in females and rat pups: they attacked and bite each other and the worker. Negative effect of GM-soya could be connected with the penetration of foreign genes into the cells of rats and of pups according Shubbert et al. (1994, 1998) or/and with the accumulation of Roundup in GM-soya.

P49

Impulse control disorders in eating disorders: clinical and therapeutic implications

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We explored the prevalence of lifetime impulse control disorders (ICD) in women with bulimia nervosa (BN), compared severity of eating disorder in women with BN with and without ICD, and

compared their personality profiles to females with one form of ICD, namely pathological gambling. Method: A total sample of 269 female patients, consecutively admitted to our Unit, participated in the current study [173 BN without comorbid ICD (BN-ICD); 54 BN with comorbid ICD (BN + ICD) and 42 pathological gamblers (PG)]. All participants were diagnosed according to DSM-IV criteria.

Evaluation: Assessment measures included the Symptoms Checklist (SCL-90-R) and the Temperament and Character Inventory-R (TCI-R), as well as a number of other clinical and psychopathological indices.

Results: In BN, the observed lifetime prevalence of ICD was 23.8%. Lifetime compulsive buying (17.6%) and intermittent explosive disorder (13.2%) were the most frequently reported ICD. BN subtype was not significantly associated with lifetime ICD ($P = 0.051$), or with ICD subtype ($P = 0.253$). After using multinomial regression models, we observed that BN + ICD and PG showed the highest scores on novelty seeking ($P < 0.0001$). But BN + ICD women had the lowest scores on self-directedness ($P < 0.03$) and higher scores on general psychopathology ($P < 0.01$) and drug abuse ($P < 0.01$).

Conclusions: BN+ lifetime ICD presented more extreme personality profiles, especially on novelty seeking and impulsivity, and general psychopathology than BN without this condition. Some personality traits in BN + ICD are more similar to with PG than BN without ICD.

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P50

Comparison of personality traits in bulimia nervosa and pathological gambling: a case-control study

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We compared personality profiles of individuals with bulimia nervosa (BN), with pathological gambling (PG), an impulse control disorder, and with healthy controls (CG).

Method: The sample comprised 270 BN [241 females–29 males], 429 PG [42 females–387 males], and 96 healthy controls (CG) [35 females–61 males]. All patients were consecutively admitted to our Psychiatry Department and were diagnosed according to DSM-IV (APA, 1994) criteria. All analyses controlled for gender differences.

Assessment measures included the Temperament and Character Inventory-R (TCI-R), as well as a number of other clinical and psychopathological indices (SCL90-R). Multinomial and binary logistic regression models adjusted for age and gender were used to compare all three groups.

Results: In comparison to controls, high novelty seeking (OR 1.05; 95%CI 1.02–1.07; $P < 0.001$) and persistence (OR 1.02; 95%CI 1.00–1.03; $P < 0.013$) were associated with a diagnosis of PG. Low self-directedness was associated with both BN (OR 0.92; 0.89–0.94; $P < 0.001$) and PG (OR 0.95; 95%CI 0.93–0.97; $P < 0.001$). BN patients displayed higher overall psychopathology than PG ($P < 0.001$).

Conclusions: After considering age and gender, our results suggested that whereas low self-directedness is associated with both BN and PG, disorder-specific personality profiles also emerged with PG marked by higher persistence and BN marked by lower novelty seeking and higher general psychopathology.

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P51

Elevated homocysteine predicts depressive symptoms in females with eating disorders

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Background and aims: Elevated plasma homocysteine levels have been found in different psychiatric disorders, including major depression. The aim of the present study was to evaluate whether elevated homocysteine plasma levels are associated with depression in females with eating disorders.

Methods: Total plasma homocysteine levels were assessed in 45 females with anorexia nervosa ($n = 18$) or bulimia nervosa ($n = 27$). Depression was assessed using the BDI, a cut-off of 18 being used to define depression.

Results: Significantly elevated plasma homocysteine levels were observed in depressed patients (t -test: $T = 2.9$, $df: 42$; $P < 0.01$). Using a multivariate model, only plasma levels of homocysteine above $10.5 \mu\text{mol/l}$ predicted depressive symptoms ($OR = 1.38$, $CI 1.04$ – 1.84 , $P < 0.05$).

Conclusions: Elevated plasma homocysteine levels are associated with depressive symptoms in females with eating disorders. Cellular folate deficiency due to malnutrition or starvation may be the underlying cause of depression and can be indicated by an elevation of homocysteine.

P52

Occurrence and intensity of symptoms measured on honosca scale, and hormonal, BMI disturbances in patients with anorexia nervosa

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Anorexia nervosa (AN) becomes one of the most prevalent health problems among girls at puberty. The study is aimed at an analysis of 25 cases of girls treated for AN in view of the existence of correlations between intrinsic abnormalities within the tests of: TSH, fT4, FSH, LH and E2, and the number of scores on HoNOSCA scale, reflecting their health condition.

Results: Disturbances in one's body perception, somatic disease and mood disorders, most strongly expressed on HoNOSCA scale, are not related to incorrect results of hormonal tests and BMI. High scores in categories 6, 7 and 9 on HoNOSCA scale imply the occurrence of additional mental disorders which require special diagnosis. Hormonal disturbances referred mostly to decreased secretion of LH (88%), oestradiol (68%) and FSH (52%). According to the authors, to determine the relationship, more detailed scales should be applied to examine emotional disturbances.

P53

Formation of stereotypes of eating behavior in persons with excessive body

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Objective: To study regularities of adaptation of organism of a person to weight loss and its interrelationship with peculiarities of neuro-mental domain of patients.

One hundred and two women with reliable clinical signs of exogenous, alimentary-constitutional obesity. Control group—20 healthy women, having normal body mass. Clinical-psychological examination was conducted before beginning of the psychotherapy and a month later.

Methods: Psychoanamnesis; methodology of many-sided investigation of the personality; profile of social adaptation.

Factors provoking hyperphagic reactions: Eighty-four percent of patients reacted with overeating on psychoemotional tension conditioned by conflicts in family and at work, routine dissatisfaction; 72% noticed reinforcement of the appetite in front of tasty meal; in 32% overeating was provoked by intake of alcohol; in 20% appetite heightened after hard physical and mental activity, and in 12% during menstruation.

Severe emotional tension, high level of anxiety and stress typical for persons with the first degree of obesity tell about beginning formation of this inadequate mechanism of psychological defense. Decrease of above mentioned indices in persons with the second and third degree of obesity may be characterized as its stable strengthening and dominating above another more perfect ways of social adaptation.

P54

Autobiographical memory deficit in anorexia nervosa: effect of the duration of the illness on emotion regulation

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Objectives: Emotional disturbances in anorexia nervosa express in autobiographical memory recall. The aim of the study is to test whether deficits in autobiographical memory exist in anorexic patients and concern specifically negative or positive emotional valence. Moreover, it is unclear whether these deficits are dependent upon co-morbid aspects (depression, anxiety) or upon the duration of the illness.

Methods: Anorexic patients ($N = 25$) were compared to healthy volunteers on the basis of their clinical assessments (depression, alexithymia and anxiety scales) and of their scores explicit and autobiographical to memory tests. The study makes use of Williams and Scott's autobiographical test involving specific emotional cues to elicit memory.

Results: Anorexic patients recalled more general memories than controls in autobiographical memory test but had no deficit in explicit memory tests. This pattern, observed for both negative and positive cues was neither related to depression or alexithymia, nor to anxiety severity but increased significantly with the duration of the illness.

Conclusion: These results show that anorexic patients are characterized by relative difficulty in the integration of both negative and positive emotional experiences, and that this impairment is reinforced by the duration of the illness.

P55

Representation of the interpersonal relationships in the family of adolescents with anorexia nervosa or with substance abuse disorders: the point of view of the fathers, the mothers and the teenagers

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Objectives: Research on family risk factors for addictive behaviours in young people has not paid a great deal of attention to parents' knowledge of their own family functioning. The aim of the study is to compare knowledge in two groups of parents that differ regarding their adolescent's declared drug addiction and anorexia nervosa and to compare their representation with those of their adolescents.

Methods: Our study employed the multiple perspectives of mothers, fathers, and adolescents to evaluate whether the degree of autonomy and perceived cohesion and adaptability of the family distinguish the two types of addiction. Members of 52 families have responded to a battery of self-questionnaires, including information concerning their addictive behaviours, interpersonal autonomy (Hirschfeld, 1977), levels of cohesion and adaptability (FACESIII) and expressed emotions in the family (The Family Questionnaire, Wiedeman 2002).

Results: In the family with substance abuse disorders, we observe a lack of adjustment between the representations of the parents and the adolescents. The adolescents perceive a low cohesion and idealize a high adaptability while their parents do not expect a high cohesion and are critical with regard to their child.

In anorexic families, we observe a co-dependence between the members of the family. A low social autonomy and a high emotional overinvolvement in mothers are associated with a high emotional reliance and a low self-esteem in anorexic adolescents while the fathers do not await a high cohesion. The existence of a typical organization of family at risk for addictive behaviours is discussed.

P56

The father–daughter relationship in eating disorders

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Introduction: The present study intends to focus on the father–daughter relationship in order to outline a relational and personological typology.

Materials and methods: Having clinical contacts with parents of teenagers suffering from eating disorders motivated us to set up a semi-opened psychoanalytical group. After building a therapeutical alliance with parents, aiming to sustain their parental skills, the themes on the daughter-food relation took second place and the personal and conjugal conflicts and the trans-generational themes emerged. Through these themes it is possible to formulate hypotheses on the father–daughter relationship.

Conclusions: The clinical–hermeneutical synthesis shows the presence of a symbiotic and devouring mother–daughter relationship, which occurs in the absence of the “paternal third”: the daughters are not able to separate themselves from the maternal figure. Actually, this separation is hindered by the presence of a weak paternal function, which incarnates the figure of an adolescent eternally attached to his mother (Puer Aeternus). The father throws on his daughter his “Anima”, that is not integrated because of an inflated and merging relationship with his mother; thus, he does not sustain his daughter in her process of feminine individualization. The paternal function would be essential both for the daughter's development and in the conjugal and parental configuration. In effect in these families this function results to be inadequate because it is mediated by the daughter's mother through desire and mentalization.

P57

Supporting parenthood: the adversities and achievements of a group of parents of individuals suffering from eating disorders

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Introduction: The present work focuses on the utility of a cooperation/support work with families in Eating Disorders.

Materials and methods: In our outpatients' department we have had triennial experience in dealing with a group of parents of teenagers suffering from eating disorders. We work with a half-open psychoanalytical-group led by a therapist and a silent-participant. At first we receive and contain confusional and catastrophic anxieties and then we direct our work towards the building up of an alliance with parents, sustaining parental skills.

Conclusions: The opportunity of sharing one's own suffering with other members within the group creates strong bonds and an atmosphere of mutual trust that allows the gradual storage, within the group matrix, of conjugal and trans-familial conflicts thus including the trans-generational dimensions of the familiar conflict, rooted in the family history.

This reference to family's history aims to understand the presence of a process of recurrence of the past and to recognise and separate the known but not “thought” experiences of the parents' childhood from their daughter's needs and existential reality previously mistaken for the parents' own infant and adolescent sides which had not been elaborated and were, therefore, separate and projected.

In these families we witness conflicts referring to a problematic parents' Oedipus condition, which very often results in eating disorders or in a depression on the mother's side.

As a consequence, all the energies that should have been available for the formation and growth of the daughter are absorbed by the confusion derived from the parents' projections.

P58

Food and culture. bulimia, maternal ascendancy and conflict of cultures

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The French population presents an increasing number of cases of bulimia in young women of Maghrebine origin. These manifestations are not necessarily coupled with episodes of anorexia nervosa even if a concern about slimness is usually present.

A clinical approach brings up a conflicting relationship with mothers. The mothers, guardians of traditional values are paradoxically, and more clearly and more explicitly than the fathers, the real transmission system of prescriptions and taboos that have weighed upon them all along their married and social life.

Conjunctly with the conflict with the mother, the opposition between tradition and modernity manifests itself under the form of a conflict of loyalty between the ancestral and family values and the expectations and enticements of Western society, whether it be in the social life or in the sentimental, emotional or sexual life.

The bulimia behaviour, more particularly when accompanied by provoked vomiting, uses food, an element with a strong maternal connotation, to express the contradictions and the wrenching that “attack” the body and threaten its life. Under the burden of guilt that can block the psychic representation of the conflict, the struggle

between submission and revolt, between resignation and protest, between the old and the new, expresses itself by a succession of voracious and massive ingestions of food, followed by provoked vomiting that can reach dramatic proportions.

Sexuality is forbidden and the eroticisation of the body is sacrificed to the benefit of a solitary and deadly eroticisation of the diabolical devouring/rejection couple.

Poster session 1: Forensic psychiatry

P59

The disturbed parent–child communication after parental separation and its impact on the child’s psychosocial adjustment

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In the present study we attempted to investigate the relationship between two parameters: (a) the disturbed communication between separated or divorced parents and their children, and (b) the psychosocial adaptation of the children. Moreover, we attempted to understand the impact of legal and judicial orders re child-related issues on the children’s psychosocial development.

Sixty-three children and their divorced parents were studied in order to investigate the impact of (a) disturbed parent–child communication and (b) increased parental litigation re custody and access, on the child’s psychosocial development. Parents and children were administered self-completed questionnaires, while semi-structured interviews were used with children. Measures of psychosocial adjustment included psychiatric diagnoses according to DSM-IV, with emphasis in Global Assessment Functioning in the fifth axis, as well as the Social Adjustment Scale (M. Weissman, 1975) and the Self-Esteem Index for Children (J. Battle, 1981). Results showed that, as for the custodial parent, the better the communication with him the better the child’s adjustment and the higher his self esteem, while, as for the non-custodial parent, the more frequent and the better the quality of communication with him, the better the child’s adjustment, but not the higher its self-esteem. Finally, contrary to our hypothesis, the more parents litigated the better the child’s psychosocial adjustment and the higher its self-esteem. In conclusion, the disturbed parent–child communication after parental divorce constitutes a significant risk factor for poor psychosocial development of the child.

P60

Psychopathological syndromes and constitutional personality type in patients with stable angina

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Correlation of premorbid personality characteristics and vector of forensic mental disorders development in coronary disease is a problem of practical importance, in particular, for preventing of psychopathology, adverse cardiac events and for successful social rehabilitation of patients with ischemic heart disease.

The aim of the present study was to investigate the interdependence of personality psychological type and mental disorders in stable angina (SA) patients.

Subjects were 184 patients with SA of I–IV functional classes without severe concomitant diseases. Clinical interview,

pathopsychological methods of investigation and non-parametric statistical analysis were used. All patients were divided into five basic personality psychotypes—with schizoid, epileptoid, hysteroid, cycloid and mixed personality structure, and classified in the context of personality constitutional continuum: the range of psychological norm—accentuation, the range of borderline anomalous personality (BAP) (statistically admissible range reflecting constitutionally determined anomalous variability of psychological personality type).

Diffusion of psychopathologic syndromes came to 66.7%. Transitory depressive and anxiety reactions, phobic syndrome, asthenia accompanied by vegetative disorders prevailed. Stable complex psychopathological conditions (anxiety-depressive, hystero-anxiety and obsessive-phobic disorders) were uncommon. Most cases of forensic disorders were atypical or latent and occurred predominantly in representatives of hysteroid (30.9%) and cycloid (27.6%) psychotypes. Forensic disorders tended to dominate among owners of BAP inspired of personality psychotype and in patients with hysteroid personality structure. Mixed psychotype predicted auspicious prognosis.

Thus, range of BAP and hysteroid constitutional psychotype are independent predictors of neurotic mental disorders in patients with SA.

P61

Competency to consent to psychiatric hospitalization at admission

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Background and aims: Evaluation of the competency to consent to psychiatric hospitalization is a topical issue of increasing interest for professionals of mental health. Competency is a legal concept concerning the ability of a subject to make an informed decision. It is difficult to assess in clinical practice. The investigation was designed to assess the competency to consent to psychiatric hospitalization at admission.

Methods: Every subject admitted consecutively in the Unit for Acute Hospitalization II of the General University Hospital Gregorio Marañón (Madrid, Spain) during the period of time from October 2003 to March 2004 was included if met the inclusion criteria ($N = 197$). The evaluation was made within the first 72 hours of admission by five people (psychiatrists and residents) using the following instruments: Competency Questionnaire (CQ) and a socio-demographic data register. Assessors proved excellent interfiability results in the application of the CQ.

Results: Patients were considered competent if CQ punctuation of 8 or more, as recommended Conejo Galindo et al. (2003) for Spanish population. Results are ($\chi^2 = 9.16$, f.d. 1, $P < 0.05$).

Voluntary admission: competent 71% ($N = 93$), incompetent 29% ($N = 38$).

Involuntary admission: competent 48.3% ($N = 29$), incompetent 51.7% ($N = 31$).

Conclusions: Many patients admitted voluntary are not considered competent to make that decision by CQ scale. Furthermore, this questionnaire considers competent almost half the subjects hospitalized involuntary. Competency evaluation should be made before psychiatric hospitalization.

P62

Competency questionnaire in Spanish patients: an adjustment is needed

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Background and aims: Evaluation of the competency to consent to psychiatric hospitalization is a topical issue of increasing interest for professionals of mental health. Competency is a legal concept concerning the ability of a subject to make an informed decision and it is complex to assess in clinical practice. Competency questionnaire is a well known tool, designed in USA by Appelbaum et al. to assist clinicians in this task. This test consists of 15 items divided in three sub-scales: two about clinical criteria and a legal one. The questions included in the legal sub-scale seems to be poorly related to competency in Spanish population. The investigation was designed to clarify this matter.

Methods: Every subject admitted consecutively in the Unit for Acute Psychiatric Hospitalization II of the General University Hospital Gregorio Marañón (Madrid) during the period of time from October 2003 to March 2004 were included if they met the inclusion criteria ($N = 197$). The evaluation by CQ was made within the first 72 hours of admission by five people (psychiatrists and residents) with excellent inter-rater reliability results in the application of the scale.

Results: Items included in the legal sub-scale do not have a significant correlation with rest of the questionnaire and sub-scales. Multivariate statistical analysis confirms this observation and highlights the first items as the most informative.

Conclusions: The Competency Questionnaire should be reduced in order to evaluate competency in Spanish population.

P63

Factors related to the competency to consent psychiatric hospitalization

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Background and aims: Evaluation of the competency to consent to psychiatric hospitalization is a topical issue of increasing interest for professionals of mental health. Competency is a legal concept concerning the ability of a subject to make an informed decision. It is difficult to assess in clinical practice. The investigation was designed to address the factors related to the competency to consent to psychiatric competency in the time of the admission of the patient.

Methods: Every subject admitted consecutively in the Unit for Acute Hospitalization II of the General University Hospital Gregorio Marañón (Madrid) during the period of time from October 2003 to March 2004 were included if they met the inclusion criteria ($N = 197$). The evaluation was made within the first 72 hours of admission by five people (psychiatrists and residents) using the following instruments: Competency Questionnaire (CQ), Severity Psychiatric Illness Scale (SPIS), Acuity Psychiatric Illness Scale (APIS) and socio-demographic data register. Assessors proved excellent inter-rater reliability.

Results: The factors most significantly related to this competency are: previous psychiatric monitoring, diagnosis, mental state at admission (suicidal ideation, agitation, disorders of thought, confusion, judgment damage and intensity of psychiatric symptoms) and those connected with insight and acceptance of treatment.

Conclusions: Mental state evaluation is a necessary step to assess the competency of a patient to agree to hospitalization.

P64

Homicide–suicides: epidemiology, classification, prevention

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Background: Homicide–suicides are rare relative to suicides and homicides, but they are very tragic events. Homicide–suicide is the homicidal killing of one person or more, followed immediately or within a very short period of time, by the suicide of the homicidal offender.

Classical authors used to link such episodes exclusively to melancholia and to misplaced altruism. However, it seems obvious nowadays that homicide–suicides may occur within various nosographic situations and aggressiveness, sometimes hidden by rational pseudo-altruistic motivations, is often detected.

Methods: Epidemiological data concerning homicide–suicide events are summarized. After listing the different subtypes of homicide–suicides that can be identified, the authors endeavour to apprehend the complexity of such episodes. The authors then underline elements which allow to progress in the understanding of homicide followed by suicide.

Results: The annual incidence rates for homicide–suicide events range between 0.20 and 0.30 per 100,000 inhabitants per annum. Between 85% and 90% of the perpetrators are males, whereas females constitute the majority of victims. Firearms are the predominant method of death in both homicides and suicides.

One of the most common disorders found in homicide–suicide perpetrators is depression. Divorce or estrangement is the main contributing factor to homicide–suicide events, and the most common relationship type is possessive.

Conclusions: Combined homicide–suicides occur primarily between intimate relation and are precipitated by intrafamilial discord. Moreover depression plays a significant role in homicide–suicides.

Guidelines in order to prevent such events are proposed. The survivors' need for medical support is also discussed.

P65

Compulsory commitment of psychotic patients in a Portuguese psychiatric unit: 7 years of experience

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Background and aims: Data concerning the characteristics of the population submitted to involuntary commitment is scarce. The authors describe sociodemographic, clinical and legal data in a sample of psychotic patients involuntarily admitted to an acute psychiatric hospital and explore the relative roles these variables may play in the process of admission under the Portuguese Mental Health Law of 1998.

Methodology: Retrospective data on sociodemographic, clinical and legal characteristics in 44 compulsory committed psychotic patients were gathered (from January 1999 to December 2005). Pertinent data were analyzed.

Preliminary results: Of all the psychotic patients 77% are male, 76% are single, 70% are unemployed and have primary school education (77%). The majority had a previous psychiatric history of voluntary admissions (70%), lack of compliance with the medication and abandoned the follow-up consultation (80%). The schizophrenic patients group is overrepresented (87%) in this sample, has a comorbid

psychoactive substance or alcohol abuse, had an aggressive behavior previous to the compulsory commitment, against a family member or another significant person (90%). The main legal criterion for the admission is dangerousness. Men were significantly more aggressive than women ($P = 0.004$) and patients that “act on delusion” were significantly more aggressive than others without this psychopathological phenomenon ($P = 0.002$).

Conclusions: The profile of these compulsory patients is: male, single, unemployed, paranoid schizophrenia diagnosis and violent/aggressive behavior prior to admission, after abandoning the medication. Their “act on delusion” becomes a danger to others.

P66

Schizophrenia and violent crime

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Background and aims: Schizophrenia has long been associated with violent crime. There are few studies on this subject. Our study was design to investigate the aggressive behavior in a population of schizophrenic inpatients sentenced non guilty for reason of insanity, and characterize the psychopathology and its correlations with clinical, criminal and socio-demographic factors.

Method: Population: 31 schizophrenic patients sentenced to psychiatric treatment after committing a violent crime and having been considered not guilty for reason of insanity. Instruments: structured interview, PANSS, Overt Aggression Scale-Modified. Statistical analysis: SPSSv12.0

Results: A significant proportion of the schizophrenic offenders had committed a homicide (45%) or attempted murder (26%). The majority lived with family (71%), was unemployed (58%) and single (74%). They are subtype paranoid (98%). Only 23% had criminal records and 65% were diagnosed previous the arrest. The victim was a family member in 45% and a neighbor in 32% of the population. A violent act was committed by 32% of the patients before the diagnosis. Drinking patterns were identified in 51% before the diagnosis and drug abuse was identified in 55% after the diagnosis (previous the crime). They were significantly more aggressive the week before the crime ($P < 0.001$) against people ($P < 0.011$) and objects ($P < 0.006$), than the last year.

Conclusions: After drawing a profile of these patients, we conclude that they are similar to involuntarily committed schizophrenic. Although they are no longer dangerous, they still remain in a security male prison because of the double stigma: schizophrenic and criminal.

P67

Legal and ethical aspects of forensic treatment in the republic of macedonia

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Forensic treatment is time consuming and demanding process, frequently exposed to public criticism and regularly attracting actual interest in circumstances of shocking and spectacular events incidental to some relapsed acts of delinquency committed by persons either currently undergoing or having completed their treatment.

Forensic psychiatry is regularly exposed to most criticism whenever an incident involves a person currently under treatment with an institution publicly expected to provide particular protection against violence.

The aim of this work was to analyze the application of ethical principles for the practise of Forensic Psychiatry in Macedonia. The

main hypothesis was that the analysis of the application of the ethical principles in Psychiatric Hospital Skopje, as the greatest and most important psychiatric institution in Macedonia, might point at some practical problems of implementation of the ethical principles into everyday psychiatric and judicial practice.

Ethical issues in forensic psychiatry are perhaps more complex than ethics in the practice of general psychiatry. Forensic psychiatrist serve as both treating and evaluating clinicians and the latter role has drawn the most concern from an ethics perspective, given the adversarial context in which such evaluations typically occur. This work briefly reviews some important ethical issues in the practice of forensic psychiatry, including ethical theory, codes of ethics, boundary issues confidentiality, consent, honesty, qualifications.

P69

Consensus guidelines for independent medical examinations

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Background and aims: Ethical guidelines exist to help guide the practice of practitioners. Specialist practice demands that generic ethical guidelines require tailoring to suit the needs of a particular specialty. Subspecialty guidelines are now being developed in psychiatry. This paper examines the process undertaken by the Forensic Section of the World Psychiatric Association in developing a consensus paper for the conduct of Independent Medical Examinations.

Methods: At the XIIIth World Congress of Psychiatry in Cairo in September 2005, the Forensic Section Committee of the WPA decided to develop consensus papers in five key areas. One of those areas is the subject of this paper. The author was given the task of developing the structure of the guidelines and then consulting widely before final drafting of the consensus paper for wider dissemination.

Results: The guidelines describe the special process of independent medical examination and report writing. They describe the way the psychiatric report should be assembled and examine ethical issues surrounding the preparation of the report. The differences between treating and independent psychiatrist reports are discussed, and emphasis is placed on the need for transparency and for the reporter to be unbiased. The essential components of the report are described and the need for facts to be clearly separated from opinion is emphasized. Finally, advice is provided on how to avoid ethical breaches.

Conclusions: Psychiatric reports need to be undertaken in an ethical manner, include all pertinent information and be presented in plain language.

P70

The mental healthcare system in French prisons: the current and forthcoming situation

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The present state of the mental healthcare system in French prisons should be considered, in order to allow an improvement in the psychiatric care given to inmates. These aspects are developed and discussed using data gathered from literature and the study of activity reports from mental healthcare services in prisons during 2002 and 2003.

All 26 Regional Medical and Psychological Units (SMPR) will not, alone, meet the needs in psychiatric hospitalisation. They must exercise their duty of regional coordination, which at the moment is inadequate, as well as acting as a reference position for the future

Specifically Designated Hospitalisation Units (UHSA). The SMPR and UHSA represent the top of this system. However, without a solid base, the latter cannot exist. This base is made of the mental healthcare services: sectorized mental healthcare services treating inmates. They give medical treatment to many more prisoners than the SMPR do. They are responsible for the diversified and strongly competitive care.

Unfortunately, the term “mental healthcare system” has no official recognition; something which would be essential vis à vis the SMPR, the UHSA, the general psychiatric units, the out-patients units and the judicial and penitentiary administrations.

With regard to these statements, the mental healthcare system in French prisons will need to evolve rapidly in order to offer efficient medical treatment.

P71

Perception of coercion exercised at admission and hospitalisation in psychiatric wards. EUNOMIA—final results in the Czech Republic

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Background: The international project EUNOMIA pursues the application of coercive measures in psychiatric treatment. The main part of the study consists in a battery of questionnaires distributed among involuntarily admitted patients and those perceiving some coercion at their admission.

Aims: Presentation of the way in which involuntarily admitted patients, medical staff and patients' relatives perceive coercion in relation to admission and hospitalisation.

Methods: Within the questionnaire the patients assess a degree of coercion exercised by others. The degree of coercion is assessed also by the medical staff participating in admission and, if possible, by patients' relatives. The assessment is done within 7 days and 1 month after the admission.

Results: Between 1.9.2003 and 30.8.2005 the centre in Czech Republic included 203 involuntarily admitted patients and 60 voluntary admitted patients perceiving certain coercion. Most patients thought they had been forced, in particular by their relatives, to undergo the psychiatric treatment. The degree of coercion subjectively perceived by the patient is higher than that perceived by the medical staff or the family members. After a month treatment most patients view their admission in a positive way. Patients characterise the exposition to coercion during hospitalisation in the psychiatric ward as lower than that experienced at admission. Medical staff again assessed coercion during hospitalisation as lower.

Conclusion: The results show that the subjective perception of coercion often stems from insufficient patients' insight accompanying an acute mental illness. After the stabilization of their mental state patients mostly assess their admission as a right measure.

P72

Schizophrenia and competence

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Introduction: Competence impairment to consent to psychiatric hospitalization poses a challenge to common psychiatric practice. A major issue influencing competence could be diagnosis.

Objectives: To analyze the relationship between diagnosis at discharge and competence to consent to psychiatric hospitalization.

Methods: A series of 148 consecutive admissions to a psychiatric ward in a general hospital in Madrid between May and December 2004 were administered Competence Questionnaire (CQ) on admission and at discharge. CQ assesses competence to consent to psychiatric hospitalization. Diagnosis at discharge was evaluated by psychiatrist working in acute wards according International Classification of Diseases, 9th Edition Clinically Modified (ICD 9-CM). Inter-rater reliability was checked and recruitment began when appropriate scores were obtained. Informed consent was obtained from each patient.

Results: Seventy-two female (48.6%) and 76 male (51.4%), with a mean age of 40.5 years. Thirty patients (31.3%) received “Schizophrenia” as diagnosis at discharge. Sixty-six percent non-schizophrenic patients were “competent” at admission while only 24.1% patients diagnosed as schizophrenics (Chi2: 16.3; $P < 0.000$). Fifty percent schizophrenic patients resulted “competent” at discharge. Found correlations were: “CM: MT”: Spearman 0.684, $P < 0.000$; 83.3% patients that received non-schizophrenic diagnosis escorted as “competent” at discharge whereas 50.0% patients that received “schizophrenia” diagnosis did (Chi2 9.9; $P < 0.002$).

Conclusions: Patients receiving a schizophrenia diagnosis are in a more risk to be “non-competence” to consent to psychiatric hospitalization to admission than non-schizophrenic patients. Inpatient treatment improves competence of schizophrenia patients.

P73

Mothers who kill

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Maternal filicide is not a random crime, which is predominantly committed by mentally ill women, but there is evidence that such crimes are deeply embedded in every culture. In the scientific literature there exist different types of mothers, who commit child homicides (i.e. neonaticide, fatal child neglect, abuse-related, assisted or coerced and intended maternal filicide—Oberman, 2003). The legal circumstances that surround such crimes differ between cultures. We will present own case reports of mothers, who committed child homicides and attempted their own suicide afterwards. They suffered from personality disorders, two of them showed a borderline personality organization. We want to enlighten the different methods of homicides and suicides, by paying particular attention to psychodynamic aspects as the ego defence mechanisms, the self and the object representations, the binding style of mothers who have killed one or more of their children. Neonaticide is often associated with a denial of pregnancy, sometimes also with a dissociation syndrome; killing by fatal neglect is associated with a severe personality disorder, often with co morbidity to addictions or severe mental illness, such mothers could not develop the ability of concerning. Mothers with an abuse related filicide show a violent or sexual abuse in their earlier life and live often in violent relationships. Results in our investigation may be compared with findings in the scientific psychiatric and psychotherapeutic literature.

P74

Involuntary admission into a special forensic psychiatry hospital

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After a short review of ethics and some legal and clinical aspects of forensic psychiatry in Romania, we shall talk about the involuntary commitment of mentally ill and their treatment in Psychiatry Hospital Stei. Standards and practice in our country regarding the involuntary

commitment have been changed more than three times after the second War and has been improved in 2002, when there appeared the new Mental Health Law, emphasizing protection of patients' rights. The requirement of involuntary commitment in a Psychiatric Department or involuntary treatment in an ambulatory one of persons with mental disorders is established concerning the mental state and the danger degree of their behaviour. The legal ground for treatment of persons dangerous to others is to protect public safety; the legal basis for treatment of suicidal or gravely disabled persons is to protect their lives or safety. In boss cases the ethical basis is to benefit the patient by treating the mental disorders. There are legal and ethical limits to involuntary hospitalisation, because involuntary treatment and hospitalisation restricts a person's liberty.

There should be a lot of things to do to improve the quality standards: improvement of elementary care needs, improvement of their quality of life.

P75

Forensic psychiatry in Bulgaria and EU mental health legislation: synchronisation, challenges, contributions

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Background: Current Bulgarian legislation is being modified according to the requirements of synchronisation with the primary and secondary legislation of the European Union. The objective of this communication is to overview the existing tradition and legal basis for the mental health implications of legislation concerning the Penal, Civil Code and the Health Law in Bulgaria, and to assess the extent of the differences.

Methods: A descriptive approach is utilised in order to represent the achievements of the mental health legislation in Bulgaria concerning the non violation of patients' human rights, coercive treatment. Comparative analysis is made between illustrative relevant acts and laws in the European legislation and the tradition in Bulgaria, its modification and implementation, concerning competence, fitness and other forensic concepts.

Results: The existing primary and secondary legislation representing the framework of the forensic psychiatry in Bulgaria differ from EU models regarding the form, but the contents of the concepts is common.

Conclusion: Although the existing primary and secondary legislation might need further improvement and synchronisation, they guarantee objectivity and professional accuracy up to the European standards.

P76

Forensic issues in psychiatry in Bulgaria

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Forensic psychiatry in Bulgaria has been an object of scientific interest for the last 100 years. Numerous authors have contributed for the development of the theory of and putting it to practice. Among them are: Dr. Dimitar Vladov—his monograph "L'homicide et pathologie mentale", 1908 has been awarded by the French Academy of Science; Professor Nikola Shipkowsky—his monograph "Schizophrenia und Mord", 1938 is still widely recognised. He introduced the term mortification to describe the homicide behaviour of schizophrenic patients and thus recognizing that patients with schizophrenia are not

completely aware of their own behaviour. Forensic psychiatry has become a field of interest for many modern Bulgarian authors as well and thus forming the theoretical basis of the modern Bulgarian psychiatry and legislation practice.

Forensic psychiatry has been recognised as a sub-specialty after achieving the specialty for General psychiatry. Three months practice in Forensic psychiatry department is part of programme for achieving the specialty of General psychiatry.

The Bulgarian legislation has recognised that patients with psychiatric disease during an exacerbation of their illness are not responsible for their acts and are objects of involuntary treatment.

Theoretical, legal and organizational issues will be discussed to make the picture of the modern Forensic psychiatry in Bulgaria complete.

P77

Homicidal validity of delusions among homicide schizophrenic offenders

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The information from literature show that overall criminal activity among schizophrenics is not different either quantitatively or qualitatively from that which found in the normal population. On the other side, Nestor et al. indicated that the higher incidence of lethal acts of violence may characterise intellectually intact, but psychotic individuals with organise delusions involving personal, accessible targets. The purpose of this study was retrospective analysing delusions among schizophrenic patients-homicide offenders ($N = 50$), treated in maximum security setting—Forensic Centre in Gornja Toponica and comparing with the same symptoms among schizophrenic patients without criminal behaviour ($N = 50$), using diagnostic ICD X criteria for schizophrenia and the psychiatrist's reports in the authority courts. The results suggested that the significantly higher representation of persecutory delusions, ideas of reference and jealous delusions among the homicidal schizophrenic offenders, comparing with the other group of schizophrenic patients. Homicidal schizophrenic offenders significantly higher suffered from persecutory delusional beliefs about specific persons, well-known, relatives or friends or had fixed delusional systems, while the second group of schizophrenic presented persecutory delusions about non-specific or specific persons, often unknown to the patients. We can conclude that delusions, especially persecutory, jealous and ideas of reference are important factors associated with the high risk of homicidal behaviour and consequently important for preventing homicidal behaviour among high-risk populations.

P78

Distribution of criminal activity among mentally abnormal offenders

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Both crime and schizophrenia are quite common events, and thus it would be reasonable to anticipate, from chance alone, that a considerable number of people suffering from schizophrenia might also be criminal. The information from literature show that overall criminal activity among schizophrenics is not different either quantitatively or qualitatively from that which found in the normal population. On the other side, Nestor et al. indicated that the higher incidence of lethal acts of violence may characterise intellectually intact, but psychotic individuals with organise delusions involving personal, accessible

targets. The purpose of this study was retrospective analysing delusions among schizophrenic patients-homicide offenders ($N = 50$), treated in maximum security setting—Forensic Centre in Gornja Toponica and comparing with the same symptoms among schizophrenic patients without criminal behaviour ($N = 50$), using diagnostic ICD X criteria for schizophrenia and the psychiatrist's reports in the authority courts. The results suggested that the significantly higher representation of persecutory delusions, ideas of reference and jealous delusions among the homicidal schizophrenic offenders, comparing with the other group of schizophrenic patients. Homicidal schizophrenic offenders significantly higher suffered from persecutory delusional beliefs about specific persons, well-known, relatives or friends or had fixed delusional systems, while the second group of schizophrenic presented persecutory delusions about no-specific or specific persons, often unknown to the patients. . We can conclude that delusions, especially persecutory, jealous and ideas of reference are important factors associated with the high risk of homicidal behaviour and consequently important for preventing homicidal behaviour among high-risk populations.

P79

A survey of admissions to a National Forensic Psychiatric Hospital, 1997–2003

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Background: Studies in other jurisdictions have identified differences between males and females within secure hospitals, particularly with regard to diagnosis, and offences. This is the first review of female forensic admissions within the Irish jurisdiction.

Objectives: To review all admissions from the criminal justice system to the Central Mental Hospital (CMH) from January 1997 to December 2003. To identify differences between women and men admitted, with particular attention to patient diagnoses, offences, and length of stay.

Methods: Electronic and handwritten records of all admissions from January 1st 1997 to December 30th 2003 were reviewed. The data was analysed using a statistical package, SPSS 12.0 for Windows.

Results: 14.4% ($n = 142$) of admissions were female. Female patients had a higher proportion of admissions of short duration. Women were more likely to have a primary diagnosis of personality disorder (26.2%) than male patients (14.3%). Both males and females showed an increase in the proportion of admissions with a psychotic disorder, although there was a more substantial increase in the female group.

Conclusions: Women appear subject to additional disadvantages distinguishing them from their male counterparts, both in the nature of their admission and the facilities available to them within the service.

Poster session 1: Schizophrenia and psychosis

P80

A point mutation at the calreticulin gene core promoter conserved sequence in a case of schizophrenia

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Exposure to atypical antipsychotic drugs such as valproate increases the expression of chaperones that assist in the folding of proteins in the endoplasmic reticulum (ER) including calreticulin, GRP78/BiP,

GRP94, and PD1. This neuroprotective role may be involved in the pathophysiology of neuropsychiatric disorders such as schizophrenia and bipolar disorder. The 5'-flanking region of the human calreticulin gene was screened in 100 cases of schizophrenia by PCR/SSCA between -485 and +1 basepair (bp) relative to the transcription start site. A G > C point mutation was detected at -48 in a case of paranoid schizophrenia, which was not detected in 280 unrelated control subjects (560 chromosomes). This is the first report of mutation in relation with the calreticulin gene. The -48G > C mutation creates a CpG site at the core promoter region. The role of this mutation remains to be clarified in the pathophysiology of schizophrenia.

P81

Acute psychosis because of epoxy resins

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Background: Among psychosis because of substances we found one produced by aromatic hydrocarbons, which is well researched as substances addiction disease but hardly anything as working disease.

Aims: To inquire into psychosis because of volatile hydrocarbons about a clinical case, to describe clinic, working setting characteristics, phases and treatment result.

Methods case description.

Therapeutics intervention description.

General considerations deduced from the case and supported on bibliography and patient cronopatobiography.

Results: Patient of 24 years, painter and decorator, with hallucinations because of petrol and two short psychotic episodes that needed hospital admission, as antecedents. Only in the second admission it could be identified epoxy resins vapours inhalation as a trigger factor. Those vapours were present in the paints that he handles.

Complete remission was obtained with 9 mg/day of risperidone during a week. Nowadays he remains asymptomatic and retired for his job.

Volatile hidrocarbons are present in working setting and they are not usually considered as risk factor. There is hardly any publication on this matter, so we must think about it. They can be cause of invalidity.

Conclusions:

1. Epoxy resins inhalation can caused toxic psychosis in painters and decorators.

2. If we do not consider this psicosis as occupational disease, the diagnosis could be made difficult.

3. It is basic to inquire in personal antecedents about individual susceptibility to this kind of substances.

4. A right identification of the reason makes easier the clinical symptoms solution, as treatment response is excelent.

P82

Psychotic experiences in the general population: longitudinal patterns

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Background: Psychotic symptom experiences in the general population are frequent and often longlasting. The Zurich Cohort Study offered the opportunity of differentiating the patterns over a span of 20 years.

Methods: The Zurich Study is based on a stratified community sample of 591 persons born in 1958 (women) and 1959 (men). According to the stratification two thirds of the sample consisted of SCL-90-R high scorers (global severity score above the 85th percentile in the 1978 screening) with the aim of increasing probability of psychiatric syndromes. The data

were collected at six time points: 1979, 1981, 1986, 1988, 1993 and 1999. We examined variables from two subscales of the SCL-90-R—"paranoid ideation" and "psychoticism"—using factor analysis, cluster analysis and polytomous logistic regression.

Results: Two new subscales were derived representing "thought disorders" and "schizotypal signs". Similar longitudinal patterns emerge in both subscales—continuous low level, continuous high level, intermediate level (only schizotypal signs) and decline from high to low level. Even though the subscales covary over time they are associated with different risk factors and outcomes.

Conclusions: The longitudinal patterns provide a promising clue to better understand risk factors and functional outcomes in subthreshold psychotic symptoms.

P83

The impact of transgenerational transmission on schizophrenia

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After an overview of the research in the field of transgenerational transmission of psychic traumata the author describes her own research with families of schizophrenic patients. Most of these families had repressed severe ware traumata in their history. The schizophrenic patients did not know about the feelings and the fears of their either overprotective parents, who tried to prevent them from all unpleasant feelings, or rejecting parents. They grew up in an extremely anxious and aggressive family atmosphere. The parents themselves were not separated from their own families and did not enable their children to separate from the parents or to develop their own identity. Without the possibility to separate from the primary group and to work through the traumata transmitted from the parents the children will mostly suffer from psychoses, dissociative emotional patterns, or psychosomatic disorders.

P84

Diagnosis of Axis I psychiatric disorder at a gastroenterology outpatient clinic; is this possible?

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Objective: To outline the association between psychological factors and atypical gastrointestinal symptoms, which may be the result of Axis I disorders.

Methods: We report a case of a patient who first sought medical care because of atypical gastrointestinal symptoms and after thorough gastroenterological investigation was further referred for psychiatric assessment leading to the diagnosis of Axis I psychiatric disorder.

Conclusion: We suggest that a close interaction between gastroenterologists and psychiatrists in the investigation of functional bowel disorders can on occasion reveal Axis I psychiatric disorders presenting with atypical gastrointestinal symptoms.

P85

Suicide attempts in schizophrenia and other psychotic disorders: examining the role of psychopathology

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Objective: It is estimated that 10–15% of all persons suffering from schizophrenia commit suicide. Understanding the relationship between

psychopathology and suicidal behavior among individuals with any kind of psychotic disorder can aid assessment and treatment.

Method: The aim of this study was to describe clinically 54 suicide attempters with DSM-IV-TR schizophrenia or other psychotic disorder, as seen by a consultation-liaison psychiatric service at a main general hospital in Athens of Greece between June 2002 and May 2004. Student's *t*-test, ANOVA and χ^2 -test were used to evaluate the association between clinical features and suicidality.

Results: Of the 54 attempters, 35 (65%) were men. Three-fourths attempted during an active phase of their illness. Sixty five percent had made a previous suicide attempt. Almost four-fifths reported a long history of a diagnosed psychosis and earlier hospitalization(s). The presence of delusions (72%) appeared to be significantly related to the suicide attempt. Auditory hallucinations, formal thought disorder, negative symptoms and depression did not represent a significant proportion in the entire sample.

Conclusions: The majority of psychotic attempters are males, with history of earlier attempt(s) and hospitalization(s). Suicide behavior may occur during an active phase of the illness. It is associated with the presence of delusions—mainly persecutory and of being controlled. Perhaps, they need to "escape" from mental torture. Surprisingly, a small percentage attempts suicide because of hallucinated instructions or vulnerability to depressive symptoms. Our findings delineate the profile of a psychotic patient who attempts suicide.

P86

Association between severity of psychopathology and prevalence of metabolic syndrome (MS) in psychotic patients: results from the cross-sectional Cardiovascular, Lipid and Metabolic Outcomes Research in Schizophrenia Study (CLAMORS)

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Background and aims: Data on MS prevalence in schizophrenics is limited. This evaluation was carried out to determine the relation between the severity of psychopathology and prevalence of MS in patients treated with antipsychotics.

Methods: A retrospective, cross-sectional, multicenter study was carried out by 117 Spanish Psychiatrists (The CLAMORS Collaborative Group). Consecutive outpatients meeting DSM-IV criteria for Schizophrenia, Schizophreniform or Schizoaffective Disorder, under antipsychotic treatment for at least 12 weeks, were recruited. Clinical severity was assessed by PANSS and CGI scales. MS was defined as fulfilment of at least three of the following components: waist circumference >102 (men) />88 (women) cm; tryglicerides \geq 150 mg/dl; HDL-cholesterol <40 mg/dl (men)/<50 mg/dl (women); blood pressure \geq 130/85; fasting glucose \geq 110 mg/dl. Multivariate logistic regression models were applied.

Results: 1452 evaluable patients (863 men, 60.9%), 40.7 \pm 12.2 years (mean \pm S.D.) were included. MS was presented in 24.6% [23.6% (men), 27.2% (women); *P* = 0.130]. After adjustment, age [$>$ 40 years (men)/45 years (women)] and severity of schizophrenic symptoms (PANSS $>$ median value) were associated with higher risk of MS [odds ratios (95%CI); 1.82 (1.42–2.33) and 1.66 (1.29–2.13), respectively]. More patients with higher PANSS score ($>$ 68, median score) showed MS: 29.7% (95%CI: 5.2–54.3) vs. 20.0% (95%CI: 6.8–

46.0), $P < 0.001$. By MS components, prevalence of abdominal obesity, hypertriglyceridemia, hypertension and glucose intolerance were higher in patients with higher PANSS score: 39.4% (95%CI: 35.6–43.2) vs. 46.3% (95%CI: 42.3–50.4), 33.3% (95%CI: 29.7–37.0) vs. 41.1 (95%CI: 37.1–45.0), 49.9% (95%CI: 44.4–55.5) vs. 58.4% (95%CI: 52.7–64.1), 11.2% (95%CI: 6.5–15.9) vs. 17.9% (95%CI: 12.1–23.7), respectively, $P < 0.05$. More patients with higher CGI scores showed MS.

Conclusions: MS prevalence was higher among schizophrenic patients treated with antipsychotics with more severe psychopathology.

On behalf of the CLAMORS Collaborative Group.

P87

Aripiprazole compared to standard-of-care in the management of community-treated schizophrenic patients (Schizophrenia Trial of Aripiprazole: Star Study)

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Background and aims: Naturalistic trials provide an opportunity to assess the overall performance of drugs using measures which encompass efficacy, safety and tolerability (i.e. effectiveness). The effectiveness of aripiprazole at 26 weeks was compared to standard-of-care among community-treated schizophrenic patients warranting a change in current medication due to tolerability problems and/or suboptimal clinical symptoms control.

Methods: A total of 555 patients were equally randomised to open-label treatment of aripiprazole (10–30 mg/day) or standard-of-care (SOC) (olanzapine 5–20 mg/day, quetiapine 100–800 mg/day or risperidone 2–8 mg/day). Overall effectiveness was evaluated using the validated Investigator Assessment Questionnaire (IAQ) Total Score at Week 26 (LOCF). The IAQ Total Score is the sum of 10 items: positive symptoms, negative symptoms, somnolence, weight gain, prolactin elevation, akathisia, EPS, cognition, energy, and mood. Lower scores indicate better effectiveness.

Results: At week 26, mean IAQ Total score was 25.7 ± 0.5 for aripiprazole versus 27.7 ± 0.5 for SOC (LOCF, $P < 0.001$). A significantly higher CGI-Improvement response rate (“very much” or “much improved”) was observed in the aripiprazole group (44%) compared with the SOC group (34%) (LOCF, $P = 0.009$). Significantly more patients in the aripiprazole group (47%) compared with the SOC group (29%) rated their study medication as being “much better” than their prior medication (LOCF, $P < 0.001$) on the Preference of Medication (POM) scale.

Conclusions: Aripiprazole demonstrated statistically superior effectiveness to standard-of-care agents in a naturalistic setting. In real-world practice, medication choices should consider efficacy, safety and tolerability issues.

P88

Risk for coronary heart disease (CHD) in psychotic patients: results from the cross-sectional Cardiovascular, Lipid and Metabolic Outcomes Research in Schizophrenia Study (CLAMORS)

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Background and aims: Data on CHD risk and related factors in schizophrenics under antipsychotic treatment are emerging. The aim of this study was to document CHD risk in schizophrenic patients treated with antipsychotics.

Methods: A retrospective, cross-sectional, multicenter study was carried out by 117 Spanish Psychiatrists (The CLAMORS Collaborative Group). Consecutive outpatients meeting DSM-IV criteria for Schizophrenia, Schizophreniform or Schizoaffective Disorder, under antipsychotic treatment for at least 12 weeks, were recruited. CHD risk was assessed by SCORE (10-year CV death) and Framingham (10-year all CV events) equations. Multivariate logistic regression models were applied.

Results: 1452 evaluable patients (863 men, 60.9%), 40.7 ± 12.2 years (mean \pm S.D.), were included. The overall 10-year risks were 0.9 ± 1.9 (mean \pm S.D.) and 7.2 ± 7.6 for SCORE and Framingham, respectively. 8% (95%CI: 6.5–9.5) and 22.1% (95%CI: 20.0–24.3) of patients showed high/very high risk according to SCORE (>3%) and Framingham (>10%) equations. More males than women showed high/very high risk with SCORE and Framingham scoring: 9.9% (95%CI: 7.8–12.0) vs. 5.2% (95%CI: 3.3–7.2), $P = 0.002$; and 27.7% (95%CI: 24.7–30.7) vs. 13.5% (95%CI: 10.7–16.4), $P < 0.001$, respectively. Age, ICG severity and PANSS scales were positively associated with CV death and CV events risk. Compared with haloperidol, ziprasidone was significantly more likely to have lower risk (<10%) for CV events [adjusted odds ratio (95%CI): 1.81 (1.06–3.10), $P = 0.031$]. No significant differences were observed with other antipsychotics.

Conclusions: CHD risk was found higher among psychotic patients treated with antipsychotics than in the general population. Age, sex, poor disease control and antipsychotic treatment could be associated with CHD risk.

On behalf of the CLAMORS Collaborative Group.

P89

Safety and tolerability of rapid versus conventional dose escalation with quetiapine in acute schizophrenia and schizoaffective disorder: a randomised, multicentre, parallel-group, open trial

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Introduction: Quetiapine is efficacious in managing symptoms of acute psychosis, including agitation, aggression and hostility. This study examined rapid-dose escalation of quetiapine in acutely ill patients.

Methods: Two-week, multicentre, randomised, parallel-group, open-trial of 269 inpatients diagnosed with schizophrenia (51%) or schizoaffective disorder (49%) randomised to rapid ($n = 139$) [200, 400, 600, 800 mg/day on Days 1–4] versus conventional ($n = 130$) [50, 100, 200, 300 mg/day on Days 1–4] dose escalation, followed by flexible dosing for the remainder of the study (maximum 800 mg/day). Primary endpoint was the proportion of patients experiencing ≥ 1 episode of any of the selected adverse events (AEs; somnolence, dizziness, orthostatic hypotension) by the end of Week 1. Secondary endpoints included discontinuation due to AEs and efficacy, assessed by BPRS and CGI-S scores.

Results: The proportion of patients with ≥ 1 selected AE during Week 1 was 9.4% and 5.4% and the most common (reported by >5% of patients), were hypotension (10.8%, 5.4%), tachycardia (7.9%, 5.4%), somnolence (5.8%, 2.3%) and sedation (4.3%, 3.1%), in the rapid and conventional groups, respectively. During Week 1, 3 (2.1%) patients from the rapid and 5 (3.8%) from the conventional group

withdrew due to AEs. BPRS and CGI-S scores decreased significantly ($P < 0.0001$) from baseline at Days 5 (BPRS changes: -15.91 , -13.47 ; CGI-S changes: -4.27 , -4.16) and 14 (BPRS changes: -26.47 , -24.71 ; CGI-S changes: -3.53 , -3.33) in the rapid and conventional groups, respectively.

Conclusion: Results suggest that rapid-dose escalation of quetiapine to 800 mg/day by Day 4 is effective, safe and well-tolerated in this patient population.

P90

Is there a link between illness' representations, religion and adherence to treatment?

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Objective: Non adherence to treatment is one of the foremost problems affecting schizophrenic patients. The objective of this study is to assess patients' representations of their illness and medication, as well as the possible impact of such representations upon adherence to treatment.

Methods: One hundred and three outpatients with an ICD-10 diagnosis of schizophrenia, aged between 18 and 65, treated in an outpatient facility, were assessed with a semi-structured interview investigating their representations of illness and medication, as well as their religious beliefs and practices. Drug monitoring documented their adherence to treatment. Their caregivers were also interviewed about the medical adherence of these patients with a semi-structured instrument.

Results: Half of the patients had a representation of their illness directly influenced by their spiritual beliefs (positively in 27% and negatively in 23%).

The other half seemed to stick to medical models of illness (fragility, vulnerability) without having their spiritual beliefs intervening in their image of the disease.

The results showed a strong association between non adherence to treatment and representations of illness ($P = 0.002$) and treatment ($P = 0.01$), directly influenced for most of them by their spiritual beliefs.

There were significantly more non-adherent patients ($P = 0.03$) that underlined a contradiction and incompatibility between their spiritual convictions and supportive therapy.

Conclusion: This study highlighted a strong link between patients' illness and medication representations, influenced for half of them by their spirituality and non adherence to treatment.

Investigating and discussing these representations in clinical practice could reinforce adherence to treatment as well as the patient's resources.

P91

Tolerability of risperidone long-acting injectable in french patients

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Objective: The tolerability of a direct transition to risperidone long-acting injectable in adults with schizophrenia or other psychotic disorders requiring a change of treatment.

Methods: Patients clinically stable for ≥ 1 month received risperidone long-acting injectable (25 mg, increased to 37.5 mg or 50 mg, if necessary) every 14 days for 6 months.

Results: The study included 202 patients (70% male) of mean age 38 ± 12 years. Most patients (86%) suffered from DSM-IV schizophrenia, and 22% needed a treatment change due to adverse events. Previous treatments were atypical antipsychotics (64%), depot (34%) and oral (8%) conventional neuroleptics. The ESRS total score was significantly reduced from baseline to treatment endpoint (7.4 vs. 3.4; $P < 0.001$). Similarly, the Parkinsonism subscale score was also significantly reduced from baseline to endpoint (5.8 vs. 2.6; $P < 0.001$). The most frequent treatment-emergent adverse events ($>5\%$) were anxiety (15.3%), insomnia (8.9%) and weight gain (8.9%). Only two injection-site related events were reported and one glucose-related event. Mean weight gain at endpoint was minimal (0.5 kg), and there was no significant change from baseline to endpoint in mean BMI (26.0 vs. 26.2 kg/m²).

Conclusion: Direct transition to risperidone long-acting injectable was well tolerated and significantly improved movement disorders.

P92

The Verona Brain Imaging Study in schizophrenia: an integrated project with epidemiology and social psychiatry

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Introduction: Cerebral atrophy has been reported in schizophrenia by several magnetic resonance imaging (MRI) reports. We investigated in schizophrenia patients representative of the epidemiologically defined catchment area of South Verona, Italy, the relationships between anatomical volumes and psychosocial variables (compliance, quality of life, disability, insight).

Methods: Patients with psychotic symptoms between 18–65 years old from the area of who had a contact between December 2002 and April 2004 with the South Verona Mental Health Services (75,000 inhabitants) were identified and underwent a 1.5 Tesla MRI session. Social psychiatry variables were explored using specific scales. Intracranial, total cerebral and total cerebellar volumes (ICV, TBV, TCV) were obtained.

Results: Three hundred patients were identified of whom 229 had a standardized diagnosis of schizophrenia. Eighty-nine patients were excluded according to the inclusion criteria. The remaining 140 were contacted for recruitment: 56 denied to participate, whereas 84 accepted. Patients studied with MRI and those who refused to be recruited were comparable for socio-demographical/clinical variables. Patients and controls ($N = 80$) did not significantly differ for ICV, TBV, TCV (ANCOVA, $P > 0.05$). A significant inverse correlation between volumes and age was found in patients ($P \leq 0.02$), but not in controls ($P > 0.05$). The effects of social psychiatry variables on anatomical volumes are currently under investigation and will be shown at the conference.

Conclusion: Accelerate physiological aging effects on brain anatomy can be easier detected in large samples of schizophrenia patients representative of epidemiologically defined catchment areas. The association between social psychiatry features and cerebral anatomy in schizophrenia will be debated at the congress.

P93

Clinical predictors of response and non response to olanzapine and risperidone in schizophrenic patients

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Schizophrenia is a chronic disability that leads to significant residual morbidity. Treatment response studies would help to reduce therapeutics failures and long term prognosis of this severe and frequent disorder.

The aim of this study was to determine if the initial clinical assessment, particularly dimensional, by the five dimensions solutions (negative, positive, excitation, cognitive, and anxiety/depression factor) of PANSS can predict the short term drug response.

Eighty-nine schizophrenic patients (DSM-IV criteria), were prospectively assessed with the PANSS. A diminution of 20% at the PANSS and a score less than 35 at the BPRS at day 42 were both criteria to define responders.

Twenty-eight patients were, defined as responders and 61 were non responders. The total (110.2 vs. 95.4 $P < 0.01$) and general (51.8 vs. 44.6 $P < 0.5$) score of the PANSS and the score of positive (30.0 vs. 26.1) and excitation (20.5 vs. 16.0) sub scores of the five dimensions factors were statistically different between non responders and responders at day 0 and were correlated to the response ($r = 0.93$, $r = 0.86$, $r = 0.75$, $r = 0.79$). For responders there is a correlation between initial cognitive and negative scores and response ($r = 0.79$, $r = 0.61$). Curiously initial anxiety/depression factor does not differ between responders and non responder and is not correlated to the response.

Initial dimensional assessment, particularly anxiety/depression score, does not contribute to indicate predictive treatment response. General psychopathology and total PANSS score moderately elevated, can predict treatment response.

P94

Are motor symptoms predictive of cognitive dysfunction in drug-naïve patients with a first episode of psychosis?

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Background and aims: Extrapyramidal movement disorders can be intrinsic features of the psychosis and some authors relate them with cognitive dysfunction. The study's aim was to examine whether motor symptoms at the drug-naïve state may predict a worse cognitive performance after 6 months of antipsychotic treatment.

Method: A total of 53 never-medicated subjects with a first episode of psychosis were assessed three times (before beginning treatment, 1 and 6 months after starting antipsychotic treatment) for neurocognitive variables including Verbal Fluency Test, Trail-Making B Test, Wechsler Memory Test, Neurological Evaluation Scale (NES) for soft neurological signs and the Wisconsin Card Sorting Test (WCST). Motor abnormalities were rated according the Extrapyramidal Symptom Rating Scale (ESRS), the Abnormal Involuntary Movements Scale (AIMS), the Rogers's Catatonia Rating Scale (RCRS), and the Barnes's Akathisia Rating Scale (BARS).

Results: At baseline the mean (S.D.) of motor abnormalities was as follow: parkinsonism 1.77 (2.87), dyskinesia 2.68 (3.07), akathisia 0.19 (0.39) and catatonia 1.45 (2.46). Repeated ANOVAS revealed an association between akinetic extrapyramidal signs and worse results in WCST number of perseverations ($F = 4.757$ $P < 0.011$). Moreover, severity of dyskinesia was associated with worse scores in the Wechsler Memory scale ($F = 6.136$ $P < 0.003$) and Trail Making test ($F = 4.796$, $P < 0.010$). Catatonic symptoms were associated with neurological soft signs ($F = 6.06$, $P < 0.003$).

Conclusions: The preliminary results partially support the initial hypothesis. Akinetic parkinsonism, dyskinesia and catatonic symptoms suggest a worse cognitive performance during a 6-month period.

P95

Association between severity of psychopathology and risk for coronary heart disease (CHD) in psychotic patients: results from the cross-sectional Cardiovascular, Lipid and Metabolic Outcomes Research in Schizophrenia Study (CLAMORS)

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Background and aims: Data on CHD risk and related factors in schizophrenics under antipsychotic treatment are emerging. This evaluation was carried out to determine the relation between the severity of psychopathology and CHD risk in schizophrenic patients treated with antipsychotics.

Methods: A retrospective, cross-sectional, multicenter study was carried out by 117 Spanish Psychiatrists (the CLAMORS Collaborative Group). Consecutive outpatients meeting DSM-IV criteria for Schizophrenia, Schizophreniform or Schizoaffective Disorder, under antipsychotic treatment for at least 12 weeks, were recruited. Clinical severity was assessed by PANSS and CGI scales, and CHD risk by SCORE (10-year CV death) and Framingham (10-year all CV events) risk equations. Multivariate logistic regression models were applied.

Results: 1452 evaluable patients (863 men, 60.9%), 40.7 ± 12.2 years (mean ± S.D.), were included. The overall 10-year risks were 0.9 ± 1.9 (mean ± S.D.) and 7.2 ± 7.6 for SCORE and Framingham, respectively. Eight percent (95%CI: 6.5–9.5) and 22.1% (95%CI: 20.0–24.3) of patients showed high/very high risk according to SCORE ($\geq 3\%$) and Framingham ($\geq 10\%$) equations. More patients with higher PANSS score (>68 , median score) showed high/very high risk with SCORE and Framingham scoring: 10.6% (95%CI: 8.0–13.1) vs. 6.2% (95%CI: 4.6–8.4), $P < 0.05$; and 27.6% (95%CI: 24.2–31.1) vs. 17.8% (95%CI: 15.0–20.6), respectively, $P < 0.05$. More patients with higher CGI scores showed high/very high risk.

Conclusions: CHD risk was higher among psychotic patients treated with antipsychotics with more severe psychopathology: the more severe psychopathology the higher the risk.

On behalf of the CLAMORS Collaborative Group.

P96

Changes in weight and weight-related quality of life in aripiprazole versus standard-of-care treatment in a Multicenter, Randomised, Naturalistic, Open-Label Study (Schizophrenia Trial of Aripiprazole: STAR study)

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Background and aims: Weight gain is a distressing side effect of antipsychotic medication in schizophrenia patients. This naturalistic trial investigated mean change in weight and weight-related quality of life (QOL).

Methods: Weight and weight-related QOL were assessed at baseline and Weeks 8, 18, and 26 in schizophrenia patients ($n = 555$) participating in a randomised open-label study comparing aripiprazole treatment to standard-of-care (SOC). Weight-related QOL was assessed with Impact of Weight on Quality of Life-Lite [IWQOL-Lite]. Adjusted mean change from baseline was compared between groups using ANOVA.

Results: Baseline characteristics were comparable between groups. Significant differences ($P < 0.001$) were found in mean weight change, with aripiprazole decreasing: 1.3 kg and SOC increasing 1.4 kg. Significant improvements in QOL were observed in aripiprazole relative to SOC at Weeks 8, 18 and 26 for Physical Function ($P = 0.048$; $P = 0.007$; $P = 0.004$) and Self-Esteem ($P = 0.007$; $P < 0.001$; $P < 0.001$), and at Weeks 18 and 24 for Sexual Life ($P = 0.007$; $P = 0.031$), and Total Score ($P < 0.001$; $P = 0.001$).

Conclusions: The aripiprazole group experienced decreased weight and improved weight-related QOL over 26 weeks compared to standard-of-care, demonstrating that significant weight-related QOL improvements are achieved in a brief time frame.

P97

The genetics of schizophrenia and bipolar disorder/implications for psychiatric nosology

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The elucidation of genotype–phenotype relationships of major psychiatric entities is at an early stage, but current findings highlight the need to consider alternative approaches to traditional classification that dichotomised psychotic disorders into schizophrenia or bipolar disorder. For schizophrenia, genetic linkage evidence from multiple family studies exists for chromosomes 5q, 6p, 8p, 10p, 13q, 18p and 22q. For bipolar disorder, genetic linkage evidence from multiple family studies exists for chromosomes 4p, 6p, 16p, 12q, 13q, 18p, 21q and 22q. Specific genes or loci have been implicated in both disorders; DISC1, DTNBP1, NRG1, DAOA(G72), RGS4 as schizophrenia susceptibility loci, and DAOA(G72) and BDNF as bipolar disorder susceptibility loci. DISC1 and NRG1 may confer susceptibility to a form of illness with mixed features of schizophrenia and mania. As psychosis susceptibility genes are identified and characterized over the next few years, this will have a major impact on our understanding of disease pathophysiology and will lead to changes in nosologie and in the clinical practice of psychiatry.

P98

Switch from atypical APS to long-acting risperidone: symptom control in French patients

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Objective: To investigate the effects on symptom control and functioning of a direct transition from oral atypical antipsychotics to risperidone long-acting injectable (RLAI) in patients with schizophrenia or other psychotic disorders requiring a change of treatment.

Methods: Adults with schizophrenia or other psychotic disorders who were clinically stable for ≥ 1 month, but required a change in their

medication, received RLAI 25 mg (increased to 37.5 mg or 50 mg, if necessary) every 2 weeks for 6 months.

Results: A subgroup analysis was performed with 130 French patients (69% male, mean age 36 ± 12 years). The majority of these patients (84%) suffered from DSM-IV schizophrenia (mainly paranoid). At endpoint, 41% of patients showed an improvement $\geq 20\%$ in PANSS total score. Mean total PANSS score was reduced from baseline to endpoint (78.3 vs. 67.8; $P < 0.001$). Significant improvements were also seen in all three PANSS subscales and in almost all symptom factors. There were significant improvements ($P < 0.001$) from baseline to endpoint in mean scores for CGI-Disease Severity (4.4 vs. 3.6) and GAF (53.2 vs. 59.8).

Conclusion: Transition from an oral atypical antipsychotic to RLAI resulted in significant improvements in symptom control and functioning in patients in France.

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Reduced neuron density and enlarged minicolumn spacing in fusiform cortex in schizophrenia

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Background: Reduced fusiform gyrus volume in schizophrenia is reported in MRI studies. Evidence from brain lesions and reduced fMRI activation in schizophrenia suggest the fusiform is involved in object naming and categorisation. Fusiform minicolumns are normally more widely spaced in the right hemisphere.

Methods: We assessed cell size, shape and density of pyramidal and non-pyramidal neurons and glial cell density in layers III and V of fusiform cortex from 11 (six females, five males) controls and 10 (five females, five males) subjects with schizophrenia. Size and shape of 120 pyramidal and 120 non-pyramidal cells per case, by outlining at a point where the nucleolus was clearly visible, were estimated. Unbiased stereology was used to assess cell density: 450–600 cells were counted per subject. Automated computer analysis of digitized microscope images of cortex measured minicolumn spacing.

Results:

- 1) Pyramidal cell density was reduced in schizophrenia.
- 2) Non-pyramidal cell density was reduced in schizophrenia, in layer III, in the left hemisphere, and this was greatest in females.
- 3) Non-pyramidal cells were larger in schizophrenia.
- 4) Glial cell density was unchanged.
- 5) In schizophrenia, minicolumns have lower density.

Conclusions: In the fusiform cortex, reduced pyramidal and non-pyramidal neuron density is consistent with decreased fusiform cortex volume and reduced cell density in other regions reported in the literature. Pyramidal cell loss might contribute to poor activation in imaging studies. Larger non-pyramidal neurons in schizophrenia might compensate their lower density. Wider minicolumn spacing in schizophrenia may be related to the reduced cell density.

P100

Proton magnetic resonance spectroscopy of the frontal white matter in schizophrenia: preview and preliminary report

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Background: Proton magnetic resonance spectroscopy (1H-MRS) is able to measure levels of cerebral metabolites such as *N*-acetylaspartate, choline and creatine. Previous investigations with 1H-MRS in schizophrenic patients have reported discrepant findings. The major findings in previous studies were a lower *N*-acetylaspartate/creatine ratio in the prefrontal cortex with the deficit syndrome than in the healthy subjects and nondeficit patients. As *N*-acetylaspartate could reflect neuronal density, these results are being suggested a neuronal loss in the prefrontal cortex of deficit patients, supporting previous results showing hypofrontality in deficit schizophrenia. The absence of segmentation analyses is one major limit of the previous studies. The voxels contained various proportions of gray and white matter, which often complicated the interpretation of any observed changes in the metabolite concentrations.

Aim: The aim of this study is to examine with a single voxel spectroscopy, whether low ratio of *N*-acetylaspartate to choline and creatine is associated with negative symptoms in schizophrenic patients.

Methods: Proton magnetic resonance spectroscopy and rating scales for positive and negative symptoms have been used to study metabolic impairments and ratings of symptoms in patients with schizophrenia in confrontation with control subjects. 1H-MRS has been performed on a Siemens Symphony 1, 5 Tesla MRI system. Proton spectra are obtained from an 1, 5 cm³ voxel in the dorsolateral frontal white matter.

Conclusions: The authors hypothesize that in vivo measure of prefrontal neuronal pathology in patients with schizophrenia would be predicted negative symptoms.

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An objective measure of daily functioning in schizophrenic patient

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Background: Because assessment of daily living skills are an important treatment outcome of schizophrenia, the Schizophrenia Objective Functioning Instrument (SOFI) was developed to expand on existing functioning measures by providing an objective measure of a comprehensive range of functional domains (Living Situation, Instrumental Activities of Daily Living, Productive Activities and Social Function). The SOFI is interview-administered to patients or informants. Closed-ended Likert scaled items addressing key aspects within each domain (e.g., autonomy, degree of assistance required) are rated following open-ended questions. Domain-specific global score and an overall global score are available.

Method: This study evaluated the psychometric performance of the SOFI. Data were collected from 104 patients at nine US sites (80% schizophrenia, 20% schizoaffective disorder; 66% male, mean 42 ± 13 years). Stratified recruitment ensured a range of living situations: 49% unrestricted, 20% semi-restricted, 31% restricted.

Results: Test–retest reliability data indicated stability of the global ratings with intraclass correlation coefficients (ICCs) ranging from 0.72 (Social Functioning–Patient) to 0.94 (Living Situation/IADLs–Informant). Construct validity was supported by moderate to high correlations (Spearman correlation coefficients $r = 0.52–0.78$) between

the SOFI and the Quality of Life Scale (QLS). Discriminant validity was excellent: SOFI global scores differentiated between high and low psychopathology (based on PANSS scores), and high and low cognitive impairment (based on the Brief Assessment of Cognition in Schizophrenia (BACS) scores), and differed by extent of living environment restriction, as expected.

Conclusion: The SOFI is a new objective method for measuring function which provides reliable, valid data suitable for monitoring schizophrenia treatment progress.

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Reducing the stigma of mental illness in Greece: research, training and communication

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In an effort to fight stigma and discrimination because of schizophrenia, the World Psychiatric Association (W.P.A.) began a worldwide program under the title “Open the Doors” in 1996. In Greece, the University Mental Health Research Institute (E.P.I.P.S.I.) implements this program. Aiming to expand this initiative so as to address all the other forms of mental illness, besides schizophrenia, EPIPSI has also launched a wider program called “Program against the stigma of mental illness”. This is a scientific program that involves research, training and communication initiatives that aim to inform and raise community awareness about the stigma of mental illness. More specifically, the program seeks to develop strategies against negative attitudes, prejudice and discrimination towards people with a mental illness and, in particular, people with schizophrenia. The focus of research is on monitoring beliefs and attitudes about mental illness, as well as towards people that are mentally ill. Research findings guide the development of educational interventions that are specifically designed to address particular population groups, such as patients and their families, mental health professionals, medical students, high school students, police officers, mass media representatives and artists. Finally, communication initiatives involve active cooperation with the Mass Media, the production of educational and informative material (e.g. pamphlets brochures, website), the development and coordination of a volunteer network, as well as the organization of conferences, workshops and of cultural events.

P103

Randomized controlled trial of cognitive-motivational therapy and family intervention for initial phase of schizophrenia

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Objective: The aim of this study was to assess whether patients with a DSM-IV diagnosis of schizophrenia (initial phase) improve with addition of Cognitive-Motivational therapy specific program (PIPE) to treatment as usual (TAU).

Method: A total of 32 participants with initial phase of schizophrenia were randomized to receive either treatment as usual (TAU) ($N = 13$) or TAU + PIPE ($N = 19$). PIPE comprised individual and family Cognitive-Motivational therapy for 12 months (24 sessions). Clinical assessments were carried out at pre-treatment, during the intervention (quarterly), and post-treatment by external raters, using the PANSS and the Brief Psychiatry Rating Scale (BPRS).

Results: Significant greater clinical effects were observed in patients treated in TAU + PIPE (pre-treatment, post-treatment) on the PANSS-P ($P = 0.005$), on the PANSS-N ($P = 0.025$) and on the PANSS-PG ($P = 0.000$). There were statistically significant differences between groups at 3 months from baseline assessment ($P = 0.001$) and at 6 months ($P = 0.001$) on BPRS scale, Future data at 12 months will be presented.

The resulting relapse rate is always higher in the control group in all measurements. Statistically significant differences were observed in global relapses between the two groups ($P = 0.02$). Moreover people in the control group needed an increase of medication during the study ($P = 0.05$). No statistically significant differences were observed in admissions and emergencies at 6 months to start the treatment.

Conclusions: These results show promise for the impact of the TAU + PIPE on improving symptoms, and preventing relapses in patients with initial phase of schizophrenia.

P104

Pathological journey: is there a “Geneva syndrome”?

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Objective: Pathological journey is seldom studied in psychiatry. Several international organizations have headquarters in Geneva and were thus hypothesized to attract pathological travelers to Geneva. The present study aimed at identifying and characterizing such pathological travelers.

Method: Patients referred for pathological journey to the sole psychiatric hospital in Geneva were retrospectively identified on the basis of medical certificates. Their medical records were then analyzed. The study covered a 4-year period.

Results: Seventy-six patients were identified, who had been hospitalized after a pathological journey to Geneva. A majority was male, aged less than 50 and single; 62% came from European countries and 84% had some prior psychiatric history; 58% were diagnosed with schizophrenia or delusional disorder. Sixteen patients (21%) had been attracted to Geneva specifically because of international organizations, while 70 came for other reasons. When compared with the latter subgroup, patients attracted by international organizations came more often from abroad, had less often prior connections in Geneva, were referred less often after police intervention but more often through emergency facilities and were less frequently discharged to hospitals in their place of residence. Prevalence of persecutory delusions was significantly higher among travelers attracted by “international Geneva” (88% vs. 43%, $P < 0.005$).

Conclusions: Although a marginal phenomenon (less than 1% of admissions), pathological journey represents an identifiable cause of psychiatric hospitalization in Geneva, with 21% of patients traveling specifically for Geneva international organizations.

P105

Late onset psychosis—a descriptive study

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Introduction: Several features have been characteristically associated with late-onset psychosis, including predominance of female, sensory impairment, more systematised delusional ideas (often of the partition

type) and hallucinations. On the contrary thought disorder and negative symptoms are uncommon.

Objectives: Describe and analyse the characteristics of a sample of subjects presenting with their first episode of psychosis after the age of 45.

Methodology: Retrospective descriptive study.

Evaluation scale: Specific sociodemographic and clinical protocol.

Inclusion criteria: Subjects admitted with first episode of psychosis (ICD10 criteria) beginning after age of 45.

Exclusion criteria: Absence of primary affective disorder and organic disorder.

Statistical analysis: Statistical Package for Statistical Science 13.0 (SPSS).

Results: Sample of 33 patients (age 62 ± 8.9 years) with a predominance of female gender (79%), married (52%) and living with own family (68%).

Diagnoses were Persistent Delusional Disorder (52%), Acute and Transitory Psychotic Disorder (39%) and Schizophrenia (9%).

Age of onset was between 45 and 69 years in 58%, between 60 and 74 in 30% and above 75 years in 12%.

Social isolation was reported in 28%, associated medical illnesses in 46% and sensory impairment in 6%.

A third had paranoid personality traits.

Delusions were mostly of persecutory (58%) and mystic/religious (15%) types. Hallucinations were present in 42% and were mostly auditory. Depressive symptoms occurred in association in 24%. Formal thought disorder and negative symptoms were very rarely reported.

Conclusions: Our study suggests that specific sociodemographic and clinical characteristics (gender, marital status and diagnosis) are more frequent in late onset psychosis. Further investigation is required.

P106

Effects of medication on executive functions in first episode psychosis

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Objectives: To assess the specific effects of atypical neuroleptics agents on executive functions in first episode patients with a fMRI study.

Methods: Among individuals with a first episode of psychosis ($n = 10$; mean of CPZ Eq = 121.43 S.D. = 26.73; mean of cumulative dose = 1660 S.D. = 428.17), psychopharmacological effects on executive functions were investigated with three fMRI paradigms: random movement generation task, N-Back verbal working memory task and overt verbal fluency task. The data were analysed using established non-parametric techniques in XBAMv3.4 (voxels P value = 0.05, clusters P value < 0.01 , P error type I < 1).

Results: During the motor generation task, the treated group showed reduced engagement of left posterior cingulate, right cingulate and left inferior parietal lobule relative to the drug-free group, but greater activation in the right cerebellum and right postcentral gyrus. During the N-Back verbal working memory task the treated group showed greater engagement in the left lingual gyrus and less engagement in the right medial frontal gyrus and left inferior parietal lobule when compared to the drug-free group. During the verbal fluency task the treated group showed greater engagement in the left middle frontal gyrus and less engagement in the bilateral caudate,

left thalamus, right postcentral gyrus, left medial frontal gyrus, when compared to the drug-free group.

Conclusions: Atypical neuroleptics induced differential neural activations of executive functions in patients with a first episode of psychosis.

P107

Duration of untreated psychosis and neurocognitive functioning

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Background and aims: Several authors have hypothesized that prolonged untreated psychosis may have a neurotoxic effect on the brain. This study examined the relationship between the duration of untreated psychosis (DUP) and neurocognitive functioning.

Methods: Fifty-three neuroleptic-naïve patients with a first episode of psychosis underwent a neuropsychological assessment at baseline, 1, and 6 months after antipsychotic treatment. Neurocognitive assessment included Verbal Fluency Test, Trail Making-B Test, Wechsler Memory Test, Neurological Evaluation Scale (NES) and Wisconsin Card Sorting Test (WCST) perseverative errors. DUP was defined as time since onset of first behavioral symptoms, first psychotic symptoms and first continuous psychotic symptoms. The associations between DUP definitions and neurocognitive variables were examined by means of Spearman's correlation coefficients. The Bonferroni correction method for multiple testing was used and each DUP definition was considered as a family of hypothesis (0.05/15, $P = 0.0033$).

Results: The mean duration for first behavioral, psychotic and continuous psychotic symptoms was 34, 31 and 19 months, respectively. Significant correlations between the three DUP families and neurocognitive functioning were absent or weak. At 1-month, WCST perseverative errors were correlated with duration of first psychotic symptoms ($r = 0.33$, $P = 0.020$) and with duration of first continuous psychotic symptoms ($r = 0.32$, $P = 0.026$). At 6-month, total NES score was correlated with duration of first continuous psychotic symptoms ($r = 0.29$, $P = 0.037$). After Bonferroni correction all significant correlations disappeared.

Conclusions: The lack of significant correlations between DUP definitions and neurocognitive variables does not support the hypothesis that a prolonged untreated psychosis conveys a neurotoxic effect on the brain.

P108

Evolution of neurological soft signs in first-episode psychosis

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Background: Neurological soft signs (NSS) are minor brain abnormalities considered biological trait markers in psychosis.

Aims: This study aimed to examine the course of NSS through a 6-month follow-up period and its relationships with psychopathological status and type and doses of drugs administered.

Methods: A total of 53 drug-naïve patients with a first episode of psychosis were studied. Three points of assessment were carried out: baseline and 1 and 6 months after antipsychotic treatment.

Measurements included the Neurological Examination Scale (NES), the Comprehensive Assessment of Symptoms and History (CASH) and a specific scale to assess the intensity and type of drugs administered in previous day, week and month of each assessment point.

Results: No significant association between NES (total score and subscales) and CASH psychopathological dimensions and treatment at any of the three time points was found. NES total score and subscales scores showed an improvement over the follow-up period, except for the NES 'motor coordination' subscale, which remained stable. Magnitude of difference of means between baseline and sixth month assessments of NES total score and NES subscales scores was small (effect sizes between 0.2 and 0.6).

Conclusions: NSS are evidenced since the first episode of psychosis. They are neither related to psychopathological dimensions nor to characteristics of treatment employed. NES total score and subscales scores showed a small but significant improvement over the first 6 months of treatment, except for the NES 'motor coordination' subscale.

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The effect of a weight management programme to prevent weight gain during treatment with olanzapine

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Introduction: The clinical relevance of drug-induced weight change is obviously due to increased rates of morbidity. Studies on the effectiveness of a behaviour-based weight gain prevention treatment in schizophrenic patients are still lacking. The principal objective of this trial is to investigate the preventive effect of a comprehensive behavioural treatment programme on weight gain in schizophrenic patients under olanzapine treatment.

Method: In a randomized open-label study, schizophrenic patients (DSM-IV) with a weight gain of at least 1.5 kg during the initial 4-week-treatment with olanzapine are included (Phase I). The active period of randomized behavioural treatment versus standard information over 6 months follows (Phase II). Phase III will evaluate the long-term effect of behavioural therapy for another 6 months.

Results: In the ongoing study we have enrolled 77 schizophrenic patients. 57% of the randomised patients dropped out. Currently 10 patients (verum $n = 7$, controls $n = 3$) have completed the study. During phase II the mean weight gain of the controls was 9 kg ($\pm 8,6$) compared to 2.8 kg (± 4) in the treatment group. During the following phase III this difference was even more pronounced - although not reaching the level of significance ($P = 0.17$).

Conclusion: The preliminary results of this study suggest a preventive effect of weight management in schizophrenia. The high percentage of drop out rate is mainly explained by disease related factors and by study participation requirement. Further research is necessary to optimise the strategy of weight management in schizophrenic patients and to clarify its efficacy.

P110

Delusional consciousness: a phenomenological approach

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Background and aims: One of the main ideas of phenomenological psychiatry is to consider mental illness as one of the possibilities of human existence. It provides clinicians an interesting approach of delusion and helps them to understand this peculiar experience.

Methods: We will present the case of Michelle, who is a 54-year-old patient with paranoid schizophrenia. Through her speech, we will try to reveal the basic structures of delusional subjectivity.

Results: First of all, delusion can be understood as a failure in the process that enables consciousness to constitute an Authentic Other, which is the foundation of intersubjectivity. That is why delusional consciousness can evolve towards either a monopolization of subjectivity (a subject who denies all kind of others) or a desertion of subjectivity (considering itself as an object in front of others). Moreover, delusional consciousness proves itself to be a consciousness of knowledge. This knowledge is separated from daily life, because of a neutralization of the objects' reality. This neutralization is very close to a philosophical process called "reduction", which is an attempt to dismiss any theory or preformed opinion about reality, in order to reach the essence of things.

Conclusions: Phenomenological psychiatry understands delusion as a possibility of man, and oversteps the classical opposition between norm and pathology to approach mental illness as an illness of liberty.

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Stigma and psychopharmacotherapy and psychopharmacotherapy and stigmatization

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Early diagnosis followed by early start of treatment is essential for the success in treating schizophrenia. However, apart from the benefit brought to the patient by the diagnosis and the ensuing treatment, it marks at the same time the beginning of a stigmatisation process resulting in the patient's discrimination, emotional and social isolation, briefly, an attached stigma. That is the reason why patients tend to postpone or shy away from seeking medical assistance, which in turn delays the beginning of treatment, with all the adverse effects this may have on both the evaluation and the outcome of the disorder. And while stigmatisation and stigma adversely affect a timely and continuous treatment of schizophrenia with psychopharmacotherapy as its main component, the side effects of psychopharmacotherapy, such as EPS, dystonia, oculogyric crisis, akathisia, drug-induced parkinsonism, etc. can aggravate stigmatisation and stigma building awareness.

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Fewer but heavier caffeine consumers in schizophrenia: a case-control study

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There is an association, according to the literature, between schizophrenia and caffeine consumption, but it is not clear whether schizophrenia is associated with either higher prevalence of daily caffeine intake or the amount consumed. We compared our previously published schizophrenia patients ($n = 250$) with a control sample ($n = 290$) after controlling for demographic variables and tobacco and alcohol consumption. Daily intake of caffeine was less frequent in schizophrenia and older subjects, but more frequent in smokers and alcohol users. Among caffeine consumers, heavy caffeine intake (>200 mg/day) was significantly associated with schizophrenia, older age and smoking. Daily amount of caffeine intake and of smoked cigarettes correlated significantly in the schizophrenia but not in the control group; the correlation of caffeine

intake with nicotine dependence was low and non-significant in both groups. Although schizophrenia by itself may be associated with heavy caffeine intake in caffeine users, part of this association was explained by the association between schizophrenia and smoking; animal studies have shown that caffeine may induce nicotine consumption and human studies have demonstrated that smoking increases caffeine metabolism. The relationship between caffeine and alcohol intake appeared to be more complex; alcohol and caffeine use were significantly associated, but within caffeine users alcohol was associated with less frequent heavy caffeine consumption among smokers. In future studies, the measurement of caffeine levels will help both to better define heavy caffeine intake and to control for smoking pharmacokinetic effects, in addition to contrast schizophrenia with other diagnostic groups such as bipolar disorder.

P113

Genetic and biological factors of families of patients with schizophrenia

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Aims: Study genetic and biological factors of families of schizophrenia for the increase efficiency of medicine and genetic service.

Methods: Ninety families of patients with schizophrenia. The clinical and genealogical analysis, the analysis of groups of blood by system ABO and a Rhesus factor, estimate of processes of apoptosis at receptor and cell-like levels for the patients and relatives of the first degree of relationship were carried out.

Results: Data about the state of health of 1506 relatives of five degrees of relationship of patients have been received. 1.2 siblings; 0.3 children; 0.1 grandsons; 0.3 spouses corresponds to one patient. Spreading of a pathology among relatives was about 6.12%. There was the accumulation of repeated cases of disorders in these families and basic share of pathology was marked among the first degrees of relationships.

In comparison with the general population among patients there was the increase of number of persons with groups of blood O (I) and AB (IV) and persons with Rh +. These groups of a blood correlate with such somatopathies as diseases of a gastrointestinal tract, cardiovascular and kidneys.

The amplification of processes of apoptosis at receptor and cell-like levels is characteristic for the patients with schizophrenia ($P < 0.05$), the tendency to an amplification of this process is characteristic for their relatives.

Conclusions: Schizophrenia—multifactorial disease, its development depend on genetic, biological and external factors, the knowledge of these features will allow rendering assistance with great efficiency.

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Behavioral and psychological characteristics in childhood of schizophrenia

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Background and aim: The experimental study that deals with the prodromes of schizophrenia considering the child's development

theory cannot be said still enough. In this research, we did a retrospective study to find behavioral and psychological characteristic in childhood of schizophrenia.

Population and method: Twenty schizophrenia outpatients in his/her 20s (mean age 25.5 ± 2.2 , 10 men and 10 females) are evaluated. All subjects are diagnosed according to DSM-IV as schizophrenia, and who present now mainly negative symptoms after passing an acute stage. We used Child Behavior Checklist (CBCL, parents evaluate and score it), to evaluate their behavioral and psychological characteristics in childhood.

Results: Verifying means of eight lower criterions (I. withdrawal, II. somatic symptoms, III. depression/anxiety, IV. social problems, V. thought problems, VI. problems of attention, VII. delinquency, VIII. aggression), only criterion I (withdrawal) was in the clinical range and all other criterions were in the normal range. Observable was an extremely lower degree of criterion VIII (aggression) than the mean of child normal group (Achenbach et al.).

Conclusion: A peculiar pathology characteristic in childhood of schizophrenia was not found. This result supports refraction-concept (Knick der Persönlichkeit) of schizophrenia. Moreover, it was suggested that an extreme lack of aggression in childhood has some relations to an appearance of schizophrenia afterwards.

P115

Reasons for participation and preference of medicine in community-treated schizophrenic patients in a naturalistic setting (Schizophrenia Trial of Aripiprazole: STAR study)

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Background and aims: Studies closer to daily clinical practice offer clinicians and patients an opportunity to assess treatment in a broader way, and more specifically the patient's perspective. This study aimed to compare the effectiveness of aripiprazole and standard-of-care in community-treated schizophrenic patients.

Methods: Five hundred and fifty-five patients were equally randomised to either aripiprazole (10–30 mg/day) or standard-of-care (SOC) (olanzapine 5–20 mg/day, quetiapine 100–800 mg/day or risperidone 2–8 mg/day). Clinicians were asked to provide the primary reason for changing the patient's antipsychotic medication. Patients and caregivers were asked to rate the study medication versus the antipsychotic taken just prior to study entry by completing a Preference of Medicine (POM) questionnaire.

Results: The most common primary reason for changing medication in the aripiprazole group was positive symptoms (31.7%) followed by negative symptoms (25.4%). In the SOC group, the most common primary reason for changing medication was negative symptoms (31.7%) followed by positive symptoms (22.5%). Significantly more patients in the aripiprazole group (47.4%) compared with the SOC group (28.6%) rated their study medication as being "much better" than their prior medication at Week 26 (LOCF, RR = 1.70, $P < 0.001$). Significantly more caregivers rated aripiprazole as being "much better" than the patients' prior medication at Week 26 (LOCF, RR = 1.70, $P = 0.043$).

Conclusions: In a naturalistic setting, poorly controlled positive and negative symptoms remain the primary reasons for changing antipsychotic medication. Patients' and caregivers' preferences are key factors of the success of the treatment.

P116

Evaluation of quality of life in community-treated schizophrenic patients: a naturalistic, open-label study comparing aripiprazole to standard-of-care (Schizophrenia Trial of Aripiprazole: STAR study)

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Background and aims: Given its naturalistic design, this effectiveness study collected patient quality of life (QOL) data in a real-life setting.

Methods: Five hundred and fifty-five patients were equally randomised to open-label treatment of aripiprazole (10–30 mg/day) or standard-of-care (SOC): olanzapine 5–20 mg/day, quetiapine 100–800 mg/day or risperidone 2–8 mg/day. Quality of life was evaluated by the Quality of Life Scale (QLS), a validated instrument designed to evaluate the current functioning of non-hospitalised schizophrenic patients, and the intrapsychic domains impacted by negative symptoms. It is divided into four domains: Interpersonal Relations, Instrumental Role, Intrapsychic Role, and Common Objects and Activities. A total score is calculated, with a higher scores reflecting a better quality of life.

Results: The mean change from baseline in the QLS Total score was 8.17 ± 1.24 in the aripiprazole group and 3.22 ± 1.31 in the SOC group at Week 26 (LOCF), indicating a statistically significant improvement in QOL in the aripiprazole group compared to the SOC group at 26 weeks (LOCF, $P < 0.001$). The mean change from baseline in the four subscale scores (Interpersonal Relations, Instrumental Role, Intrapsychic Role, and Common Objects and Activities) were statistically significant in favour of the aripiprazole-treated group at 26 weeks (LOCF, $P = 0.006$, $P = 0.005$, $P < 0.001$ and $P = 0.025$, respectively).

Conclusions: Patients treated with aripiprazole showed a significant improvement in QOL compared to the standard-of-care treatment. QOL is a determining factor of the acceptability of a treatment and may ultimately lead to improved overall satisfaction with care.

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Sexual dysfunction in a naturalistic open-label study of aripiprazole and standard-of-care in the management of community-treated schizophrenic patients

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Background and aims: Naturalistic trials allow clinicians to assess patient-reported outcomes in real-life settings. In this study, sexual dysfunction of ambulatory schizophrenic patients was assessed.

Methods: Five hundred and fifty-five patients were equally randomised to a 26 weeks open-label treatment of aripiprazole (10–30 mg/day) or standard-of-care (SOC) (olanzapine 5–20 mg/day, quetiapine 100–800 mg/day or risperidone 2–8 mg/day). Sexual dysfunction was evaluated using the validated Arizona Sexual Experience Scale (ASEX). The scale measures five items for males and females separately: sex drive, arousal, vaginal lubrication/penile erection, ability to reach orgasm and satisfaction from orgasm. Total

scores range from 5 to 30 with higher scores indicating more sexual dysfunction.

Results: The mean change from baseline in the ASEX total score was -1.44 ± 0.31 in the aripiprazole group and -0.56 ± 0.34 in the SOC group at 26 weeks, indicating a statistically significant greater improvement in sexual functioning in the aripiprazole group (LOCF, $P = 0.012$). These results were consistent with patients' prolactin levels. About 17% of the aripiprazole patients showed potentially clinically significant abnormal prolactin levels versus 54% in the SOC group. The mean change from baseline in prolactin was -32.1 ± 1.8 mg/dl in the aripiprazole group and -12.3 ± 1.9 mg/dl in the SOC group at 26 weeks (LOCF, $P < 0.001$).

Conclusions: Based on ASEX score, patients treated with aripiprazole showed a significant improvement of their sexual function which was consistent with a statistically significant decrease of prolactin levels in these patients compared to those treated with standard-of-care medication.

P118

The role of religion in suicidal attempts: a comparison between patients with schizophrenia and patients with non psychotic conditions

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Background: A growing amount of literature suggests that religion and spirituality may provide positive coping to patients with schizophrenia. More specifically, there is a need to look at the role that religion may play in this population concerning the suicidal behaviours.

Methods: One hundred and fifteen patients with schizophrenia or other non-affective psychoses and 30 patients without psychotic symptoms were included.

A semi-structured interview assessing religiousness/spirituality was conducted. Patients were asked about suicidal attempts that they had committed in the past. They were also asked about the role (protective or facilitating) of religion in their decision to commit suicide.

Results: Religion was important for a majority of patients suffering from schizophrenia or other psychiatric illnesses and treated in Geneva. Forty-three percent of the patients with psychosis had previously committed suicidal attempt(s). Twenty-five percent of all subjects acknowledged a protective role of religion, mostly by condemnation of suicide and religious coping. One out of ten patients reported a facilitating role of religion, through negative issues but also through the hope of a better outcome after death. There were no differences between groups for these results.

Conclusions: Religion can play a role in the context of suicidal attempts, both in psychotic and non psychotic patients. This role may be protective, i.e. a finding particularly important for patients with psychosis, who are known for the high risk of severe suicidal attempts. But it should not be forgotten that suicidal attempts were fostered by religion in almost one out of ten patients with psychosis.

P119

High retention in schizophrenia patients treated with long-acting risperidone: 12-month discontinuation rates in e-STAR in Germany, Spain, and Australia

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Objective: To compare 12-month retention rates in schizophrenia patients treated with long-acting risperidone (LAR) in electronic Schizophrenia Treatment Adherence Registry (e-STAR) in Germany, Spain, and Australia.

Methods: e-STAR is an ongoing web-based multinational naturalistic study in schizophrenia patients who are initiated on a new antipsychotic drug as part of their routine clinical practice. Data collected includes discontinuation rates and reasons for discontinuation following the switch.

Results: To date 4460 patients have been switched to LAR in Germany ($n = 2740$), Spain ($n = 1129$), and Australia ($n = 591$). Demographic parameters were comparable across countries. Patients had a mean age (\pm S.D.) of 40.5 (\pm 13.3) years, 59.8% were male and mean duration of illness (\pm S.D.) at the start of LAR was 11 (\pm 9.6) years. 97.1% of patients were diagnosed with schizophrenia, schizoaffective disorder.

Twelve months after initiation of LAR 78.0% of patients remained on treatment. Retention rates at 12 months were 79.2% in Germany (G), 81.3% in Spain (S), 62.8% in Australia (A). At 12 months 6.0% of all discontinuations were for insufficient response (G4.0%, S6.0%, A11.2%), and 2.7% were for tolerability reasons/adverse events (G2.6%, S1.9%, A5.7%). Patient choice accounted for 5.1% (G6.0%, S3.7%, A5.8%) of discontinuations by 12 months. Retention rate in outpatients at baseline was higher compared to the inpatient group 80% vs. 67% ($P < 0.001$).

Conclusions: Discontinuation rates for any reason are low in schizophrenia patients switched to LAR in all three countries. The high retention rate facilitates successful continuation therapy with LAR in these patients.

P120

Adherence to antipsychotic treatment. ADHES program in Poland

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The aim of the study was the evaluation of treatment adherence among schizophrenic patients. The study aimed also at the opinions of patients' family members as well as the opinions of psychiatrists about patients' compliance with treatment.

Material and methods: Two thousand and nine schizophrenic patients currently treated with antipsychotics were included. The Polish version of ADHES questionnaire was used. The form consisted of several questions regarding the antipsychotic treatment addressed to the patients (seven questions), to their families (seven questions) and to their psychiatrists (10 questions). For statistical analysis the answers to the questionnaire were calculated separately for the group of 2009 patients, 1791 family members, and 203 doctors.

Results: In the opinion of Polish psychiatrists 52% of their patients non-intentionally did not comply with antipsychotic treatment within the last 30 days, while the medication was intentionally not taken by 61% of patients. Doctors believed that following factors influence the antipsychotic compliance: patients' insight, attitudes toward the treatment, cognitive impairment, alcohol or drug abuse. According to the family members, 76% of patients fully comply with the treatment, while 45–62% purposefully do not

take the medication as prescribed. Patients' opinion revealed that 83% of male and 87% of female schizophrenics take regularly their medication. Forty-seven percent of them were upset with the daily medication routine, but only 11% of patients reported the negative attitudes toward the treatment.

P121

Comparison of long-term discontinuation rates during randomised, double-blind treatment with quetiapine or haloperidol in patients with acute psychosis

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Aim: Compare discontinuation rates between patients receiving quetiapine or haloperidol.

Methods: In this multicentre, double-blind trial, 381 patients with schizophrenia (84%) or schizoaffective disorder (16%) and acute psychosis (PANSS \geq 60; CGI-S \geq 4) were randomised to 52 weeks' treatment with quetiapine ($n = 193$) or haloperidol ($n = 188$). Quetiapine and haloperidol were initiated to 300 and 10 mg/day, with maximum doses 600 or 20 mg/day permissible, respectively. Primary endpoint was the proportion of patients discontinuing treatment. Secondary endpoints included change from baseline in PANSS.

Results: Similar proportions of patients discontinued randomised treatment before Week 52 (quetiapine 79.8%; haloperidol 79.3%; $P = 0.91$). However, quetiapine-treated patients tended to continue treatment longer (median: quetiapine 74.5 vs. haloperidol 35.0 days; HR = 0.86 [95%CI: 0.68, 1.08]; $P = 0.188$). More patients on haloperidol discontinued because of adverse events (AEs) [38.3% vs. 16.6% for quetiapine]; haloperidol patients experienced more EPS-related AEs (61.7% vs. 16.6% for quetiapine). Mean dose of quetiapine (excluding dose initiation) was 401.8 mg/day (11.4 mg/day for haloperidol). Most patients discontinuing treatment with quetiapine did so because of deterioration in condition (35.8% vs. 16.5% for haloperidol). This result could have been due to the limited dose range studied; recent clinical experience suggests a higher quetiapine target dose of at least 600 mg/day. Among patients completing 52 weeks' treatment, the mean reduction in PANSS total score was significantly greater in the quetiapine group (-41.3 [$n = 39$] vs. -31.3 [$n = 39$] for haloperidol; $P = 0.01$).

Conclusions: Treatment discontinuation rates were similar with quetiapine and haloperidol but patients receiving quetiapine tended to remain on treatment longer mainly because haloperidol-treated patients experienced more and earlier EPS.

P122

Prevalence of metabolic syndrome (MS) in psychotic patients: results from the cross-sectional Cardiovascular, Lipid and Metabolic Outcomes Research in Schizophrenia Study (CLAMORS)

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Background and aims: Data on MS prevalence in schizophrenics is limited. This study assessed the prevalence of MS in patients treated with antipsychotics.

Methods: A retrospective, cross-sectional, multicenter study was carried out by 117 Spanish Psychiatrists (the CLAMORS Collaborative Group). Consecutive outpatients meeting DSM-IV criteria for Schizophrenia, Schizophreniform or Schizoaffective Disorder, under antipsychotic treatment for at least 12 weeks, were recruited. MS was defined as fulfilment of at least 3 of the following components: waist circumference >102 (men)/ >88 (women) cm; tryglicerides ≥ 150 mg/dl; HDL-cholesterol <40 mg/dl (men)/ <50 mg/dl (women); blood pressure $\geq 130/85$; fasting glucose ≥ 110 mg/dl. Multivariate logistic regression models were applied.

Results: 1452 evaluable patients (863 men, 60.9%), 40.7 ± 12.2 years (mean \pm S.D.) were included. MS was presented in 24.6% [23.6% (men), 27.2% (women); $P = 0.130$]. After adjustment, age [>40 years (men)/ 45 years (women)] and severity of schizophrenic symptoms (PANSS $>$ median value) were associated with higher risk of MS [Odds ratios (95%CI): 1.82 (1.42–2.33) and 1.66 (1.29–2.13), respectively]. By MS components, prevalence of abdominal obesity and low HDL-cholesterol were higher in women than in men: 54.5% (95%CI: 50.2–58.9) vs. 34.3% (95%CI: 31.0–37.7), and 46.1% (95%CI: 41.4) vs. 28.5 (95%CI: 50.8), $P < 0.001$ in both cases, respectively. Hypertension and hipertrygliceridemia were more prevalent in men than in women: 59.0% (95% CI: 55.7–62.3) vs. 46.0% (95%CI: 41.8–50.2), and 40.7% (95%CI: 37.2–44.2) vs. 32.4 (95%CI: 28.3–36.5), $P < 0.01$ in both cases, respectively.

Conclusions: Compared with the general population, MS prevalence was higher among schizophrenic patients treated with antipsychotics, showing a value similar to that of general population 10–50 years older.

On behalf of the CLAMORS Collaborative Group.

P123

The impact of anxiety on quality of life in schizophrenic and schizoaffective patients

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Background and aims: There has been an ever increasing interest in the measurement of the quality of life in the field of mental health, in order to assess personal problems, to meet the needs of groups of mentally ill patients, for research purposes as well as for the planning of adequate services concerning mental health in the community. The purpose of our study is the assessment of the possible influence of anxiety on the perceived satisfaction from quality of life in schizophrenic and schizoaffective patients.

Methods: Two hundred-twelve (212) patients have been investigated, 108 males and 104 females, with an average of 39.3 years. Of these patients, 168 were schizophrenics (Group 1) and 44 were schizoaffectives (Group 2), according to the DSM-IV diagnostic criteria. The patients have been assessed using the WHOQoL-Bref scale for the measurement of the quality of life, as well as with the PANSS, MMSE and HARS scales.

Results: We found that there is a statistically very significant negative correlation between anxiety, measured with the HARS scale, and the WHOQoL-Bref scale domains 1, 2 and 4, [domain1, $r(212) = -0.59$ $P \leq 0.01$ domain2 $r(212) = -0.64$ $P \leq 0.01$ and domain4 $r(212) = -0.32$ $P \leq 0.01$] and that a statistically significant negative correlation between anxiety and the WHOQoL-Bref scale domain 3 [$r(212) = -0.37$ $P \leq 0.05$].

Conclusions: The results lead us to the conclusion that anxiety has a significant impact on the quality of life in schizophrenic and schizoaffective patients of our study.

P124

Rapid initiation of quetiapine in acutely ill patients with schizophrenia or schizoaffective disorder

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Objective: This pilot study assessed the safety, tolerability and efficacy of rapidly initiated quetiapine in patients with schizophrenia or schizoaffective disorder.

Methods: Fourteen-day, open-label study of patients diagnosed with schizophrenia ($n = 7$) or schizoaffective disorder ($n = 13$) and a CGI-Severity (CGI-S) score ≥ 4 , who received rapidly initiated quetiapine (200, 400, 600, 800 mg on Days 1–4, respectively; flexible dosing 400–800 mg/day thereafter). Primary objective measures were the number of adverse events (AEs) and dropouts in the first 7 days of treatment. Secondary objective measures included BPRS, BARS (Barnes Akathisia Rating Scale) and CGI-S scores. Vital signs were monitored throughout.

Results: Mean doses were 800 mg/day on Day 7 and 753 mg/day on Day 14. One patient withdrew from the study during the first week due to agitation. Eight AEs were reported on Days 1–7, and 4 on Days 7–14. Six AEs were treatment-related, including orthostatic hypotension (and subsequent reflex tachycardia), nausea/vertigo, hypertension and constipation; these were all mild or moderate in intensity. Mean (S.D.) BPRS scores improved rapidly within the first week (baseline, 64.2 [8.3]; Day 7, 46.4 [13.7]; Day 14, 45.9 [12.6]), as did BARS scores (baseline, 0.8 [1.2]; Day 7, 0.2 [0.7]; Day 14, 0.2 [0.5]). Regarding CGI-S scores, at baseline all patients were ‘seriously’ or ‘clearly’ ill. By Day 14, the majority of patients (63%) were ‘slightly’ or ‘moderately’ ill, the remainder being ‘seriously’ or ‘clearly’ ill. There were no significant changes in vital signs.

Conclusion: Rapid initiation of quetiapine was well tolerated and effective in this patient population.

P125

Affective disorder in the course of schizophrenia

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Among the various courses of schizophrenia, progression from an affective symptom-predominant pathology to a schizophrenic symptom-predominant pathology is seen in addition to the progression from schizophrenic symptom-predominant pathology to affective symptom-predominant pathology? In the framework of Kraepelinian schizophrenia, the former type of progression is considered typical. However, the latter type of progression seems to be increasing currently. This kind of change appears to belong to the “benign metamorphosis” of schizophrenia described by J. Zubin. In this communication, I will discuss the clinical characteristics and factors involved in the shift to an affective disorder-like state during the course of schizophrenia, with particular attention to both the role of neuroleptic medication and personality maturation to a certain degree with approaching middle age.

P126

Can electrophysiological findings be of diagnostic value for schizophrenia?

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Background and aims: Currently available laboratory procedures might provide additional information to diagnostic systems for more valid classifications of mental disorders. In order to specify electrophysiological characteristics of the brain function we measured event related brain potential during the auditory oddball paradigm. The low-resolution brain electromagnetic tomography (LORETA) was used to compute the three-dimensional intracerebral distribution of electric activity of the P3 component. Moreover we introduced discriminant function analysis of multivariate linear model using the statistical parametric mapping (SPM) 99.

Methods: The first analysis was conducted to elucidate a statistical model to classify 12 healthy subjects and 12 schizophrenia patients according to the current diagnostic system of ICD-10. The second analysis was performed to be prospectively validated a statistical model by successfully classifying a new cohort that consists of male eight healthy subjects, eight schizophrenia patients.

Results: Preliminary analysis showed that more than 70% of the subjects were correctly classified by the eigenimage of the discriminant analysis. The pattern of eigenimage was characterized by significant loadings in the left superior temporal and medial prefrontal and medial parietal regions. As further validation, the eigenimage correctly assigned more than 70% of a new group of healthy subjects and schizophrenia patients.

Conclusions: These findings indicate that certain characteristic distortions of neurophysiological activities have diagnostic value of schizophrenia. In order to improve diagnostic specificity further analysis is essential within cohorts of schizophrenia spectrum disorders.

P127

Metabolic effects and cardiovascular risk of aripiprazole versus standard-of-care among schizophrenia patients enrolled in a multicenter, randomised, naturalistic, open-label study (Schizophrenia Trial of Aripiprazole: STAR study)

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Background and aims: Recent evidence suggests that certain atypical antipsychotics are associated with metabolic adverse events such as weight gain and dyslipidaemia. These risk factors may contribute to increased risk of cardiovascular disease. The STAR naturalistic trial provided an opportunity to compare metabolic adverse events among patients treated with several major atypical antipsychotics.

Methods: A total of 550 patients were equally randomised to open-label treatment of aripiprazole (10–30 mg/day) or standard-of-care (SOC) (olanzapine 5–20 mg/day, quetiapine 100–800 mg/day or risperidone 2–8 mg/day). Clinicians were free to select the SOC agent most appropriate for the patient. Mean changes from baseline in levels of total, HDL, LDL cholesterol, triglycerides, glucose, and weight were measured at 26 weeks and compared by treatment using ANCOVA (LOCF).

Results: Total cholesterol at 26 weeks decreased: aripiprazole, 20.3 mg/dl; SOC, 7.7 mg/dl ($P < 0.001$). HDL-C increased: aripiprazole, 2.0 mg/dl; SOC, 0.4 mg/dl ($P = 0.028$). Triglycerides decreased: aripiprazole, 46.3 mg/dl; SOC, 13.0 mg/dl ($P < 0.001$).

LDL-C decreased: aripiprazole, 13.3 mg/dl; SOC, 5.8 mg/dl ($P < 0.001$). Weight decreased by 1.3 kg among aripiprazole patients and increased by 2.1 kg among SOC patients ($P < 0.001$). Glucose changes were not significant (aripiprazole, 0.2 mg/dl; SOC, 3.3 mg/dl; $P = 0.146$). Applying coronary heart disease (CHD) and diabetes risk functions (2–3) these differences suggest a 2–3% risk difference for diabetes and a 1–2% risk difference for CHD.

Conclusions: Greater improvement in the metabolic profile of patients randomised to aripiprazole versus SOC corresponds to clinically relevant reductions in subsequent diabetes and cardiovascular risk.

P128

Sexual dysfunction in psychiatric patients—II

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Background and aims: Central neuromediators of sexuality are dopamine, serotonin, glutamate and noradrenaline. Psychosis, functional and drug induced develops as a result of dysfunction of these centres and neurotransmitters, hence, disturbs sexuality. Sexuality again gets upset when psychiatric medicines effects brain and modify these neurotransmitters. This implies two are mediated by common neuromediators. Substance abuse not only causes sexual dysfunctions, its abstinence give rise to different type of sexual dysfunctions as premature ejaculation in opiates withdrawal. This article discusses sexual dysfunctions in patients with psychosis and substance abuse.

Method: An electronic search using words sexual dysfunctions, schizophrenia, addiction antipsychotic, atypical antipsychotic was made at different databases. Manual search on the same topic was followed. Only those studies were selected which met researchers' selection criteria.

Results: Only 60 studies met the criteria. 10% reported sexual dysfunctions spontaneously as compared to 60% on direct inquiry. Fifty-eight percent male and 44% of female with functional psychosis had decrease in libido, which also inhibit sexual arousal leading to erectile dysfunction in males. One third of the patients reported difficulties in orgasm. Sexual dysfunction in female was more associated with negative schizophrenia. Treatment with classic antipsychotics and risperidone produces high levels of sexual dysfunction (30–60%) in contrast to prolactin sparing antipsychotics.

Conclusion: Malfunction of neurotransmitters results in psychosis and sexual dysfunctions. Antipsychotics cause sexual dysfunctions by inducing hyperprolactinaemia and blockade of autonomic nervous system. Prevalence of sexual dysfunctions as concomitant illness with psychosis and substance abuse is high.

P129

Characteristics of psychiatric inpatients hospitalised at the request of a third party a case-control study of 30 inpatients with psychotic symptoms

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Background and aims: Involuntary psychiatric admissions have been increasing in France for 15 years. However, effects of coercion on clinical evolution is not fully understood. This study aims at exploring socio-demographic and clinical characteristics of involuntarily committed patients with psychotic symptoms.

Objective: To determine socio-demographic and clinical characteristics of involuntarily committed patients with psychotic symptoms.

Methods: During 2 months, we enrolled 30 continuous subjects aged under 65 and admitted for psychotic symptoms to a psychiatric ward of an University Hospital. Ten days after admission, we assessed each participant with the Mini International Neuropsychiatric Interview, the Brief Psychiatric Rating Scale, the 30-item Nurses Observation Scale for Inpatient Evaluation for symptoms intensity, the Scale to assess Unawareness of Mental Disorder, and the Barrier Treatment Inventory, an experimental questionnaire assessing cognitive representations of disease and care. Using different correlation tests, we analysed the associations between coercion and each socio-demographic and clinical characteristic.

Results: Seventeen inpatients were involuntarily committed (56%). Mean age was 35.4 (S.D. = 10.5), and 17 participants (56%) were female. Involuntary admission was significantly associated with history of major, depressive episod and poorer insight of awariness of treatment effectiveness and delusional symptoms. The analysis failed to show any significant differences between the two groups in terms of socio-demographic characteristics and symptoms severity.

Conclusion: This study underlines the high prevalence of negative representations of care in involuntary commitment.

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Physical ill health and risk of psychosis

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Somatic comorbidity means the presence of somatic illness in a subject with a psychiatric disorder. Patients with psychosis have been found to suffer from physical illnesses more commonly than the general population. None of the studies on schizophrenia prodromes have described perceived physical health or reported prevalence figures for physical illness. As subjects vulnerable to psychosis tend to experience anxiety and depressiveness, one could expect that these subjects would report more somatoform symptoms. This study seeks to investigate somatic ill health and its correlates among subjects with and without vulnerability to psychosis in a sample of first-degree relatives ($n = 70$), help-seekers ($n = 35$) and controls ($n = 35$). Those identified as vulnerable to psychosis had significantly worse health perceived health status than others. This was especially true for somatic symptoms on the 13 somatoform SCL item sum score. Those at current risk of psychosis had a significantly higher mean sum score on the 13 somatic items (mean = 21.1) than others (mean = 9.6) ($P = 0.013$). Having physical symptoms or a physician diagnosed illness was significantly associated with vulnerability to psychosis (OR = 3.05) and SIPS general score (OR = 1.16). Somatic ill health seems to be common among those vulnerable to psychosis.

P131

Lifetime cannabis use disorders in patients with schizophrenic psychoses—a meta-analysis (2000–2004)

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Background and aims: Our aim was to pool studies on lifetime cannabis use disorders in patients with schizophrenic psychosis and found out the rate of these disorders in these patients.

Methods: The articles were collected using several electronical databases (PsycINFO, PubMed, Ovid and Web of Science) and

manual literature search. The studies reporting rates of lifetime cannabis use disorders in schizophrenic psychoses were analysed. The search was done by using words “schizophrenia, psychos* and psychotic” to find studies on schizophrenia and “cannabis abuse”, “cannabis dependence”, “cannabis misuse”, “cannabis use disorder”, “substance abuse”, “substance dependence”, “comorbidity” and “dual* diagnos*”. We included only articles written in English and published 2000–2004. Due to a large heterogeneity we present random effect means.

Results: The results reveal large range of rates of lifetime cannabis use disorder (abuse or dependence) in different samples of schizophrenia patients. There were eight studies reporting results on lifetime cannabis use disorder. The mean of lifetime cannabis use disorder was 21.1% (range 2–50%).

Conclusions: The large variations in presented rates for lifetime cannabis use disorders in schizophrenic psychoses could be explained by cultural differences, sample characteristics and different gender distributions.

P132

Alcohol use disorders in patients with schizophrenic psychoses—a meta-analysis (2000–2004)

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Background and aims: Our aim was to pool studies on alcohol use disorders in schizophrenia and found out the rate of these disorders in these patients.

Methods: The articles were collected using several electronic databases (PsycINFO, PubMed, Ovid and Web of Science) and manual literature search. The studies reporting rates of alcohol use disorders in schizophrenic psychoses were analysed. The search was done by using words “schizophrenia, psychos* and psychotic” to find studies on schizophrenia and “alcoholism”, “alcohol abuse”, “alcohol dependence”, “alcohol misuse”, “alcohol use disorder”, “substance abuse”, “substance dependence”, “comorbidity” and “dual* diagnos*”. We included only articles written in English and published 2000–2004. Due to a large heterogeneity we present random effect means.

Results: The results reveal large range of rates of alcohol use disorder (abuse or dependence) in different samples of schizophrenia patients. There were eight studies reporting results on current alcohol use disorder and 19 studies reporting results on lifetime alcohol use disorder. The mean of current alcohol use disorder was 22.8% (range 0–65%) and lifetime alcohol use disorder 31.2% (5–55%).

Conclusions: The large variations in presented rates for alcohol use disorders in schizophrenic psychoses could be explained by cultural differences, sample characteristics and different gender distributions.

P133

Three cases of schizophrenics with no cognitive deficits

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Background and aims: Different levels of cognitive functioning in schizophrenic patients may be linked to heterogeneity of this disease. In some studies there were described groups of schizophrenics with IQ within normal limits, and no cognitive deficits measured with tests like WCST were found in them. According to some authors, 25% of subjects suffering from schizophrenia are those, who present either mild or no cognitive deficits at all. Described here are three cases of

schizophrenic patients showing no deficits measured by neuropsychological tests.

Methods: A Vienna Test System was used to measure working memory (CORSI Test), attention (COGNITRON Test), and reaction time (RT Test). All three examines patients were female, aged between 21 and 25 years. Their level of social functioning was relatively good, two of them were students, one of them already graduated from the university. They experienced periodic exacerbations of positive symptoms, which did not have a high impact on their quality of life.

Results: In each of the above patients no deficits were found in the examinations with applied neuropsychological tests.

Conclusions: These results confirm the existence of “cognitively preserved” schizophrenic subjects. Further studies on larger groups should be done to describe this phenomenon. The results of these studies could be useful in the process of including cognitive functioning into the diagnostic criteria of schizophrenia. An interesting observation is, that all three described subjects were female, as it is known that there are differences in social functioning in schizophrenia between men and women.

P134

Memory, attention and anxiety in young schizophrenics

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Background and aims: The objective of this study is to determine the parameters of cognitive processes in schizophrenia in adolescents and young adults, and following question was proposed: Is there a relation between short-term memory processes and attention, between attention and anxiety, and between attention and anxiety as state and trait in adolescents and young adults with paranoid schizophrenia?

Methods: The study included patients with paranoid schizophrenia. The control group consisted of healthy individuals. The study group consisted of individuals between 18 and 24 years of age, nevertheless the first episode of schizophrenia took place before 15 years of age. A total of 50 individuals were examined: 25 of which had paranoid schizophrenia, 25 were healthy individuals (control group). In the study the PANNS, and MMSE scales were used as screening tools. The neuropsychological evaluation was carried out with CPT Test, Free Recall and the Pictogram Methods. Additionally the anxiety level was evaluated, with the use of State-trait Anxiety Inventory (STAI).

Results: This study confirmed that there is a relation between short term memory and attention in adolescent and young adults with paranoid schizophrenia. In this group there is also a relation between short term memory and anxiety as state and trait and also a relation between attention and anxiety as state and trait.

Conclusion: The cognitive functioning in adolescents and young adults is a result of complex mental processes and a relationship between different factors should be taken in the neuropsychological diagnostics of this group of patients.

P135

A double-blind, placebo-controlled study of olanzapine in adolescents with schizophrenia

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Atypical antipsychotics are commonly used in adolescents with schizophrenia. The efficacy and safety data of olanzapine in this population from a double-blind, placebo-controlled trial are presented.

Adolescents (13–17 years) with schizophrenia received flexible doses of olanzapine (2.5–20 mg/day) or placebo for 6 weeks. LOCF mean changes from baseline-to-endpoint were assessed from the Anchored Version of the Brief Psychiatric Rating Scale for Adolescents total score (BPRS-C) and Clinical Global Impressions Scale-Severity (CGI-S). Response was defined as a $\geq 30\%$ decrease in the BPRS-C and a CGI Severity ≤ 3 .

One-hundred-seven adolescents with schizophrenia (olanzapine $n = 72$, age = 16.1 \pm 1.3 years; placebo $n = 35$, age = 16.3 \pm 1.6 years) were randomized (2:1). The mean dose of olanzapine was 11.1 \pm 4.0 mg/day. Olanzapine-treated patients experienced significant improvements compared with placebo in BPRS-C (–19.3 vs. –9.1, $P = 0.003$) and CGI-S (–1.1 vs. –0.5, $P = 0.004$). The treatment response rate was not significantly different between olanzapine (37.5%) and placebo-treated patients (25.7%).

Treatment-emergent adverse events occurring significantly more often in olanzapine-treated patients included increased weight and somnolence. Olanzapine-treated patients gained significantly more weight (4.3 \pm 3.3 kg vs. 0.1 \pm 2.8 kg, $P < 0.001$). Significantly more olanzapine-treated patients experienced treatment-emergent: high AST/SGOT, ALT/SGPT, prolactin; low bilirubin, hematocrit at any time during treatment. There were no significant differences in the incidence of treatment-emergent changes in fasting glucose, cholesterol, or triglycerides at anytime during treatment, although the incidence of normal-to-high triglycerides was approximately 3.5 times higher in olanzapine-treated patients.

In adolescents, olanzapine treatment led to significant improvements on several efficacy measures. The types of adverse events appeared to be similar to those in adults.

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The acute psychoses at patient with alcohol dependence

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The frequency of cases of the acute alcoholic psychoses had increased in Ukraine at the last time. The high mortality takes place in this group of the patients. The diagnosis of chronic alcoholism includes different types of alcohol consumption and addictive behavior (O.M. Lesch, 1988, 1990) as well as diagnosis of delirium tremens includes different types of psychosis. The problem of the diagnosis and mortality, besides all has two sides: alcohol addicts easily share delirious syndrome due to different hard somatic and neurological diseases, and from other side hard somatic and neurological pathology appears (or turn to the worse existed diseases) at patient suffered from delirium tremens. Often substance induced psychosis transformed to delirium due to a general medical condition.

The 200 patients were investigated which were hospitalized to the Center of Emergency Psychiatry with diagnose: delirium tremens. It was established different etiology causes of acute psychosis. The most of patients had delirium due to withdrawal alcohol. But the patients with hard current of psychosis had somatic and neurological pathologies, which could independent cause of psychosis. At these

patients psychotic disorders had begun as during regular consumption of alcohol as well at withdrawal period. Some patients did not consume alcohol more then 1 month. The differentiation alcoholic psychosis, organic (symptomatic) psychosis and delirium due to multiple etiologies (F10.4, F10.5 and F0.5, F0.58 F0.6 according to ICD-10) at the persons with alcohol dependence is important task because it defines the choice of medical tactics.

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Risk of rehospitalisation in antipsychotic-treated schizophrenic patients

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Background and aims: Research demonstrates that antipsychotic tolerability impacts on adherence to therapy and that non-adherence is linked to re-hospitalisation. We studied the effect of specific antipsychotic agents on re-hospitalisation rates in a large managed care database.

Methods: Analysis of patients with schizophrenia, ≥ 18 years, who were hospitalised between May 2002 and May 2004, receiving antipsychotic monotherapy ($n = 576$) post-discharge. Patients were followed from discharge until re-hospitalisation, loss to follow-up or end of study. Hazard ratios (HR) for time-to-re-hospitalisation were estimated between antipsychotic agents using first-generation antipsychotics (FGAs) as referents.

Results: Risk of re-hospitalisation was significantly lower for patients treated with second generation antipsychotics (SGAs) aripiprazole (HR = 0.27, 95% CI: 0.08–0.91) and olanzapine (HR = 0.41, 95% CI: 0.20–0.84) compared to FGAs. Lower risk for re-hospitalisation was observed for risperidone- (HR=0.53, 95% CI: 0.27–1.05), quetiapine- (HR = 0.63, 95% CI: 0.31–1.27), and ziprasidone- (HR = 0.76, 95% CI: 0.37–1.58) treated patients vs. FGAs, however, these differences were not statistically significant.

Conclusions: Patients treated with SGAs exhibit lower “real-world” rates of re-hospitalisation versus conventional agents. Patient re-hospitalisation in schizophrenia produces an enormous clinical, social, and economic burden on providers and families. The use of agents which reduce this burden is warranted.

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Risk of rehospitalisation in antipsychotic-treated schizophrenic patients

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Background and aims: Research demonstrates that antipsychotic tolerability impacts on treatment adherence. Linking non-adherence and re-hospitalisation would establish “real-world” consequences. We examined the association between adherence and re-hospitalisations using a large managed care database.

Methods: Antipsychotic-treated schizophrenic patients, ≥ 18 years, hospitalised for psychosis between November 2002 and May 2004 ($n = 480$) were categorized as non-adherent either at time of switch from initial medication or medication discontinuation. Patients were followed from treatment initiation until re-hospitalisation, loss to follow-up or end of study. Hazard ratios (HR) for the time-to-re-hospitalisation were estimated for adherent and non-adherent patients. Analysis was controlled for age, gender, region, and physician specialty, diagnosis and initial hospital length of stay.

Results: Non-adherence was a statistically significant predictor of re-hospitalisation (adjusted HR=4.6, 95% CI: 1.9–10.6). Other factors associated with risk of re-hospitalisation included age (≥ 65 years vs. 18–35 years, HR = 3.6, 95% CI: 1.24–10.58) and region (Western region vs. Midwest, HR = 1.8, 95% CI: 1.07–2.95). Psychiatric-specialty treatment was protective against re-hospitalisation (HR = 0.55, 95% CI: 0.35–0.87).

Conclusions: Non-adherence to initial antipsychotic regimens is a strong predictor of re-hospitalisation. Given the economic burden associated with re-hospitalisation, comprehensive strategies for improving adherence may lead to substantial cost savings.

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Link between adherence and re-hospitalization in schizophrenic patients

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Conclusions: Non-adherence to initial antipsychotic regimens is a strong predictor of re-hospitalisation. Given the economic burden associated with re-hospitalisation, comprehensive strategies for improving adherence may lead to substantial cost savings.

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Is late-onset schizophrenia related to neurodegenerative processes? A review of literature

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Background and aims: Since Bleuler used, for the first time in 1943, the term of late-onset schizophrenia (LOS) to refer to diagnostic group gathering some clinical features of schizophrenia but with onset after the age of 40 years, opinions about this entity are divided. The main question is to know if schizophrenia with onset more typical in late adolescence or early adult life, now called early-onset schizophrenia (EOS), and LOS are the same illness. An approach to that difficult question is to study the neuropathology underlying

those two entities. EOS appearing to be largely a neurodevelopmental disorder, presence of neurodegenerative processes related to LOS could allow to distinguish them.

Methods: A literature's review of the past decade takes stock of the various studies and hypothesis related to that subject.

Results: The various investigation's methods like clinical, imagery, electroencephalography and anatomopathology provide often inconsistent results.

It seems however possible to do some conclusions. The majority of studies refute LOS to be consecutive to Alzheimer's disease. Studies on functional imagery, white matter hyperintensity and electroencephalography would support hypothesis of neurodegenerative processes affecting individuals with latent vulnerability to schizophrenia to provoke the manifestation of symptoms. Furthermore, some anatomopathological studies support hypothesis of LOS as a specific tauopathy.

Conclusion: LOS seems to be related to neurodegenerative processes and so to be a distinct subgroup from EOS. Investigations on the nature of these processes must be pursued.

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Adjunctive treatment with risperidone in schizophrenic patients partially responsive to clozapine: a review of the evidence

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Introduction: In the last years it has been suggested that patients with diagnosis of schizophrenia with not clinical response to atypical antipsychotics such as risperidone or clozapine, may respond to a therapy based on the association of both drugs. At time, there are several cases reports, three open trials and two double-blind placebo-controlled trials to check this hypothesis.

Objective: To determine the actual degree of evidence on the use of adjunctive treatment with risperidone in schizophrenic patients partially responsive to clozapine.

Methods: A review of Pub Med articles using the following key words: risperidone, clozapine and schizophrenia.

Results: Case reports: Kontaxakis (2005) which includes 13 patients treated with clozapine associated to risperidone with clinical response on 11 of the patients. Open trials: Henderson et al. (1996) observed a decrease $> 20\%$ on BPRS score on 10 of the 12 patients treated with clozapine/risperidone. Taylor et al., 2001 found a decrease equal or higher of 20% on the punctuation of PANNS on seven of the 13 patients. De Groot did not found any responses using PANNS on the 12 patients with chronic schizophrenia. Double-blind placebo-controlled trials: Yagcioglu (2005), $N = 30$ 6 weeks, did not found any significant difference among both groups. Josiassen (2005), $n = 40$, 12 weeks, observed a significant higher decreased on both BPRS and SANS, on the group treated with clozapine/risperidone.

Conclusions: Even though longer studies are needed, treatment with clozapine/risperidone may be effective to patient with partial response to clozapine.

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Delusions of influence—a failure to predict the consequences of one's own actions

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Background and aims: Delusions of influence in patients with schizophrenia make them feel that someone else is guiding their actions. In order to investigate the mechanisms underlying these disorders of agency, we investigated the ability to discriminate between retinal image motion resulting either from their own smooth-pursuit eye movements or from external motion sources.

Methods: The amount of residual (misattributed) background motion perceived during smooth pursuit across a stationary environment is a highly specific behavioral probe to validate putative deficits in comparator mechanisms in schizophrenia patients. Pursuit was elicited by a red dot which moved at a constant velocity. Temporally located in the middle of the target sweep, a background pattern was presented for 200 ms. Subjects were asked to report the direction of perceived background motion. The velocity of the background at the PSS (point of perceived stationarity) is a direct estimate for the ability to compensate self-induced image motion.

Results: A greater amount of residual motion was perceived by subjects suffering from delusions of influence. Those patients were more impaired in predicting the visual consequences of their eye movements the more they suffered from this kind of self-disturbance.

Conclusions: We found a clear correlation between the strength of delusions of influence and the ability of schizophrenia patients to cancel out self-induced retinal information in motion perception. This correlation supports the view that delusions of influence in schizophrenia might be due to a specific deficit in the perceptual compensation of the sensory consequences of one's own actions.

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A pharmacoeconomic analysis of schizophrenia management in Sweden

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Background: Despite some progress in the treatment of schizophrenia following the introduction of atypical antipsychotics in the late nineties, current pharmacological options still carry limitations, as highlighted in a recent, large, pragmatic study in the US. Sertindole is an atypical antipsychotic with a very good tolerability profile likely to favour long-term adherence, reductions in relapse and re-hospitalisation rates and improvements in overall functioning. **Methods:** A Markov model was developed to estimate the cost-effectiveness of 5 years of antipsychotic management of schizophrenia in Sweden, comparing sertindole with haloperidol, risperidone, olanzapine and aripiprazole. Patients entered the model upon experiencing a new psychotic episode requiring psychiatric services. Confounding factors included: drug-induced adverse events (extrapyramidal symptoms, weight gain, sedation, sexual dysfunction, diabetes), conditioned compliance, relapse and treatment setting. Parameter estimates were based upon published literature and comparative clinical trial data. Resource use data were obtained from Uppsala University Hospital and costs were considered from the Swedish National Insurance perspective.

Results: The results showed that all compared atypical antipsychotics had similar cost-effectiveness and cost-utility ratios with a cost per QALY of approximately 490,000 SEK (approximately € 50,000—2005), and each dominated haloperidol. However, sertindole distinguished itself through a solid tolerability profile, which

is associated with better adherence and subsequently slightly lower costs. **Conclusions:** With equivalent clinical benefits, a good tolerability profile and lower costs associated with the treatment of fewer adverse events, sertindole is a useful alternative to the other available atypical antipsychotics in Sweden and fulfils an unmet need for additional treatment options.

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Management of early psychosis in a mental health service in Bologna: preliminary data

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Background and aims: Majority of studies shows that an early intervention for psychotic disorders improves illness' course. An Intervention Program for early psychosis in young people has been instituted from March 2003 in a Centre of Mental Health in Bologna. A specialized team provides for a specific community oriented treatment.

Methods: A retrospective study was conducted including all patients between the ages of 18 and 30 years with a diagnosis I.C.D. 10 F2 (schizophrenia, schizotypal syndromes and delusional disorder) that contacted the service between January 2001 and June 2005. We included in the study 25 patients, eight were treated with the specific intervention (Group A), 17 with a standard intervention (Group B). We have valued the number of hospital admissions and the drop out rates during first 3 months of treatment.

Results: Zero percent of Group A's subjects were hospitalized compared with 25% of Group B and drop out rates were 12.5% in Group A compared with 29.4% of Group B.

Conclusions: Our preliminary data confirm what is showed in the majority of study: an intervention program for early psychosis allows a community treatment of the patient.

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Influence of drugs abuse on hospital admission in early psychosis the experience of a mental health service in Bologna

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Background and aims: Literature shows that drugs abuse is correlated with a poor outcome in psychosis. We evaluated how the presence of drugs abuse influenced the outcome in a group of patients with early psychosis.

Methods: We included in the study all the subjects between the ages of 18 and 30 years with a diagnosis I.C.D.10 F2 (schizophrenia, schizotypal syndromes and delusional disorder) that contacted the service between January 2001 and June 2005. According to the I.C.D 10 criteria we divided the subjects in two groups: Abusers and Not Abusers. To value illness' course we considered number of hospital admissions and duration of hospitalizations.

Results: A total of 25 patients were included in the study. 12 are Abusers, 13 are Not Abusers. During the first year of treatment 41.7% of Abusers were hospitalized compared with 23% of Not Abusers. Mean duration of hospitalisation was 53 (± 40.5) days for Abusers compared with 32,3 (± 27.9) days for Not Abusers.

Conclusions: According to the literature our study suggests that drugs abuse is related to a worse course of illness making difficult a community treatment of the patient.

P146

Borderline patients and non schizophrenic psychosis

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Patients having DSM-IV criteria for borderline personality present psychotic symptoms, ranging from hallucinations (auditive, visual and cinesthetic) to manifest delusions, occasionally persistent. Behaviour problems (impulsivity, relationships, etc.) are clinically most obvious, but a subdelusional state is often manifest. Are we dealing with true borderlines or rather demonstrative non schizophrenic psychosis. In order to provide the best management for these patients, we ask ourselves: should we privilege, for example, individual psychotherapy or rather propose multi-disciplinary therapy including team work, psychotherapy, nursing care...? Moreover, should one privilege a behavioural approach or a psychopathological one? This difference is becoming less and less clear with modern international classifications. The clinician dealing with personality disorders is often confronted with a split between behaviour and psychopathology and has to make choices that can have significant consequences in terms of evolution and prognosis (number and length of hospitalisations, number of self-inflicted gestures).

Three very clear clinical cases will be presented in this poster, taking into account the psychopathology and management, respectively.

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Familial risk and prodromal features of psychosis at age of 15–16 years in the northern Finland 1985/1986 Birth Cohort

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Background and aims: Secondary prevention of schizophrenia has been started to be explored. Subjects with family history of psychosis and with prodromal symptoms are at risk for schizophrenia. The aim was to study in a general population whether adolescents with familial risk have more commonly prodromal features of psychosis.

Methods: Members of the Northern Finland 1985/1986 Birth Cohort with 9432 babies born alive were invited to participate in a field survey during 2001–2002. Then a 21 item PROD-screen questionnaire was included. It had a subscale of twelve specific prodromal features for psychosis with screening cut off point of 3 or more symptoms. Of the males 3285 (67%) and 3391 (74%) of the females completed the PROD-screen questionnaire. The participation rates in high risk offspring were 53% and 66% respectively. The Finnish Hospital Discharge Register was used to find out psychoses in parents during 1972–2000.

Results: Of the males 24% and 37% of the females were screen positives for prodromal features at the age of 15–16 years. Of the parents 117 had been treated in hospital due to psychosis. The prevalence of screen positives was 26% in males and 36% in females with familial risk.

Conclusions: Prodromal features of psychosis are prevalent in adolescence. High risk offspring tend to participate less in a field survey. It may be difficult to screen adolescent subjects at risk for

developing schizophrenia with a questionnaire in a general population, especially as these symptoms do not appear to be more common among subjects with familial risk.

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Metabolic syndrome and risk of coronary heart disease in 369 patients treated with second generation antipsychotic drugs

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Three hundred and sixty-nine adult patients treated with one or more second generation antipsychotic drugs (SGAs) randomly selected from consecutive admissions to a single psychiatric hospital underwent clinical and laboratory assessments evaluating the presence of metabolic syndrome and the Framingham 10-year risk of coronary heart disease (CHD) events. The antipsychotics used in this population were clozapine (8%), olanzapine (31%), risperidone (28%), quetiapine (28%), ziprasidone (8%) and aripiprazole (10%).

Metabolic syndrome was present in 36% of SGA-treated patients. Presence of metabolic syndrome was associated with significantly greater age-, and ethnicity-adjusted 10-year risk of CHD events (11.5% vs. 5.7%, $P < 0.0001$, odds ratio 2.02 for men; 4.6% vs. 2.2%, $P < 0.0001$, odds ratio 2.09 for women). The increased risk of CHD events remained significant after the exclusion of 49 diabetic patients. In a multiple regression analysis of variables independent of the Framingham CHD risk, triglyceride levels, fasting blood glucose and olanzapine treatment were significantly associated with the 10-year risk of CHD events (R square 0.19, $P < 0.001$).

These data indicate that the metabolic syndrome doubles the 10-year risk of CHD events (angina pectoris, myocardial infarction and sudden cardiac death) in patients receiving SGAs. In these patients, the standard approach to the primary prevention of CHD must be expanded to include a careful selection of antipsychotic drug therapy and aggressive interventions for metabolic complications of SGAs.

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Brief psychoeducational family intervention for chronic schizophrenia

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Aim: The aim of this study was to assess the impact of a brief psychoeducational intervention on the relatives of schizophrenic patients regarding their knowledge about the illness.

Method: A randomised sample was selected from a total of 60 families of schizophrenic patients. The final sample (30 families) was offered to participate in five brief psychoeducative sessions (90 min each) on the subject of schizophrenia and where clinical, pharmacological and psychosocial aspects were discussed.

Assessments were carried out at pre-treatment and post-treatment using a self-assessment questionnaire.

Results: A significant increase in the knowledge of the disease in the relatives was observed after the psychoeducative intervention ($P = 0.010$). All the families thought that the schizophrenia can be improved so much before the intervention as later ($P = 0.157$). A general improvement in the realistic expectations with respect to the patient was observed, although statistically significant differences were not observed ($P = 0.167$).

Conclusions: We observed a significant increase of knowledge about the topic in the relatives of schizophrenic patients after applying the brief psychoeducational familiar intervention. These results show that psychoeducational intervention on schizophrenic relatives could be of use for integrated treatment of the illness.

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A new psychosis-specific quality of life scale (PSQOLS) for schizophrenia and related psychoses

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Background and aims: The objective of this study was to develop and validate a Psychosis-Specific Quality of Life Scale, consisting of a self-administered questionnaire measuring issues related to patients.

Method: During a first phase ($n = 100$), identical patterns were identified from interviews of patients with schizophrenia (DSM-IV). Following discussion with 25 experts of the data obtained, the structure of the scale was formulated and included 133 items, which take 35–40 min for patients to complete. In a prospective open label study ($n = 686$), a validation analysis of structural and psychometric proprieties was performed. Finally, test/retest reliability was assessed in 100 patients over a period of 7 days on the first and last days.

Results: Data from 686 patients with schizophrenia were analyzed. Internal consistency analysis identified 14 factors (74 items) with a Cronbach's alpha at least 0.75: professional life (0.95), affective and sexual life (0.92), illness knowledge (0.90), relationship (0.92), life satisfaction, (0.87), coping with drugs (0.79), drugs impact on the body (0.87), daily life (0.83), family relationship (0.81), future (0.88), security feeling (0.84), leisure (0.87), money management (0.76), autonomy (0.75). Construct validity was confirmed using the Brief Psychiatry Rating Scale (BPRS), the Clinical Global Impression (CGI) of Improvement Scale, the Psychological Aptitude Rating Scale (PARS) and the Functional Status questionnaire (FSQ). Interscales correlations were highly significant. Lastly, there was a high test/retest reliability for each factor ($P < 0.001$).

Conclusion: The PSQOLS, a patient-oriented evaluation, is an efficient, multidimensional instrument designed to measure the impact of schizophrenia on quality of life.

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About expression in psychosis

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From the written works and drawings of two patients presenting a psychosis, different perspectives concerning expression and language occurring in that kind of disorders are reviewed. Psychodynamic theory and cognitive sciences are developed in order to enlight the understanding of those aspects.

P152

Subjective effects and main reason for smoking in outpatients with schizophrenia: a case-control study

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Background: Many studies have demonstrated elevated rates of smoking and high nicotine dependence among schizophrenia patients. However, subjective motives for smoking in schizophrenia have been investigated in only two studies (Glynn and Sussman, 1990; Forchuk et al., 2002).

Method: The study included 273 current smokers: 173 schizophrenia patients and 100 non-psychiatric subjects. The FTND was used to evaluate nicotine dependence. Based on previous research on smoking motives, (Ikard et al., 1969; Tate et al., 1994; Berlin et al., 2003), we elaborated a brief questionnaire. All participants were asked about six subjective effects, by asking whether smoking makes them more sociable, calm (anxiety-reducing), alert, concentrated, agile and cheerful (mood-increasing). To examine the main reason for smoking, subjects had to answer "Why do you smoke?" by selecting one among the following options: pleasure, calming (anxiety-reducing), necessity, addiction, habit and entertainment. For a dichotomised analysis, we merged pleasure, addiction and necessity into "reward."

Results: Patients reported subjective effects more frequently than the control group. A similar contrast was observed when all the participants were dichotomised into mild or high nicotine dependence. The main reasons for smoking were significantly different ($X^2 = 92.09$; $df = 6$; $P < 0.001$) between both groups. Logistic regression showed that schizophrenia was strongly associated with all subjective effects except for sociability. Compared with controls, calmness as the main reason for smoking was more frequent in patients, whereas smoking for reward was less frequent among them.

Discussion: Patients with schizophrenia have a distinct subjective reaction to smoking, independently of their level of nicotine dependence.

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The reliability of the early recognition inventory ERIRAOS

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Background and aims: Our contribution to the German Schizophrenia Network on "Early Detection and Early Intervention" is the development and of the Early Recognition Inventory ERIRAOS, consisting in a screening (17 item Checklist (CL)) and the Symptom List (SL) of 105 symptoms of beginning schizophrenia. For CL und SL a reliability study was conducted.

Methods: To test CL-reliability, 10 video-taped CL-interviews were presented to a total of 20 raters. Reliability analysis used Kappa coefficients and Pairwise Agreement Rates (PARs) for the symptoms and Pearson- and Intra-Class-Correlation for total scores. For SL-reliability video-taped sequences were presented to ensure that every symptom was presented once. Again, Kappas and PARs were used to evaluate symptom presence in the month of the interview, in the year of the interview, for the subjective burden caused by the symptom and for the course pattern.

Results: CL-Kappas ranged between 0.60 and 0.70, PARs between 0.80 und 0.90. For the CL scores, more than half of the correlations were >0.90 ! For the SL, Kappas are between 0.55 and 0.75 for symptom presence at interview. A remarkable result is the steady improvement in the reliability over the rating sessions.

Conclusions: It is possible to collect CL- and SL-data in a sufficiently reliable way. It is important, that interviewers are trained in the use of the schedules, that they are supervised by an experienced trainer and that continuous feedback on the quality of their ratings is given.

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Test-statistical analysis of the ERiraos-checklist

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Background and aims: The contribution of the Mannheim project to the Schizophrenia Network Study is the development of an Early Detection Inventory (ERiraos) for the project on “Early detection and early intervention”. ERiraos consists in the screening instrument Checklist (CL, 17 items), a comprehensive symptom list (SL, 105 symptom items) and several modules to assess additional risk factors. The Checklist was evaluated in regard to several test-theoretical aspects.

Methods: Firstly, we looked at the factor structure of the CL and the plausibility of the interpretation. By RASCH-Skaling we tested, if CL-scores can be interpreted in the sense of a progressive time-dependent disease process from the early to the late prodrome. Logistic Regression was used to predict the prodromal state (early vs. late) and psychotic transitions. ROC analysis was used to optimise the CL cut-off in relation to the inclusion criteria of the early intervention programmes.

Results: Seventeen CL-items defined five factors with Eigenvalues > 1 (psychosis, depression, desorganisation, social withdrawal, dysphoria). It was possible to rank the CL-items according to the RASCH-model, indicating increasing specificity for schizophrenia. Based on attenuated prodromal symptoms like ideas of reference or paranoid ideas, it was possible to differentiate the probands according to the intervention groups. ROC-analysis suggests to increase the CL-cut-off up to 10–12 to reduce the proportion of false positives.

Conclusions: Based on several methods insight into test statistical properties of the Checklist was gained and used to improve the schedule.

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Comparison of olanzapine, quetiapine, and risperidone in first-episode psychosis: a randomized, 52-week trial

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Objective: To evaluate the overall effectiveness of olanzapine, quetiapine, and risperidone in patients experiencing a first psychotic episode.

Methods: A 52-week, randomized, double-blind, multicenter study of first-episode patients with a DSM-IV diagnosis of schizophrenia, schizophreniform disorder, or schizoaffective disorder. Patients were randomized to olanzapine (2.5–20 mg/d), quetiapine (100–800 mg/d), or risperidone (0.5–4 mg/d). Clinicians were encouraged to lower the antipsychotic dose to relieve extrapyramidal symptoms (EPS). The primary outcome measure was the rate of all-cause treatment discontinuation up to 52 weeks. Statistical analysis tested for non-inferiority in all-cause treatment discontinuation rates between quetiapine and olanzapine or risperidone based on a 20% non-inferiority margin.

Results: Four hundred patients were randomized to olanzapine ($N = 133$), quetiapine ($N = 134$), or risperidone ($N = 133$) treatment. The majority of patients had a diagnosis of schizophrenia (57.8%). The mean

modal prescribed daily doses for olanzapine, quetiapine, and risperidone were 11.7, 506, and 2.4 mg, respectively. At endpoint, the all-cause treatment discontinuation rates were similar: 68.4%, 70.9%, and 71.4% for olanzapine, quetiapine, and risperidone, respectively. All treatments showed reductions in mean PANSS total, CGI severity, CDSS total subscale scores at Week 52, with no significant differences between treatments. Common elicited adverse events in all groups were daytime drowsiness and weight gain.

Conclusions: Olanzapine, quetiapine, and risperidone, at mean modal doses of 11.7, 506, and 2.4 mg/d, respectively, demonstrate similar rates of all-cause treatment discontinuation and produce similar improvements in psychopathology, but differ in their safety and tolerability profiles.

P156

Verbal fluency in schizophrenia

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Background: Patients with schizophrenia exhibit various cognitive dysfunctions, most of them rendered evident by language. Formal thought disorder was associated producing fewer contextually related words and with producing more unrelated words.

Aims: To evaluate the phonemic and semantic fluency correlated to psychopathology of schizophrenic patients, compared to healthy controls.

Material and methods: 62 schizophrenic patients, admitted to the Second Psychiatric Clinic Cluj in 2004, diagnosed according to ICD-10 criteria and 158 matched healthy controls were evaluated by PANSS, with tasks for phonemic fluency (letter p and c) and semantic fluency (animals and body parts). The data were analyzed using ANOVA and this was followed by multidimensional scaling (MDS) and hierarchical cluster analysis.

Results: Semantic clustering was found to be involved in healthy controls in word generations. Schizophrenic patients produce less words than controls, both for phonemic as for semantic fluency tasks. The number and length of word clusters were fewer in patients than in controls. Negative and disorganized symptoms are responsible for producing smaller clusters of words. Positive symptoms of schizophrenia seem to be connected to semantic deficits but not to phonemic fluency problems. It could be established a positive correlation between the amount of words produced by patients and their level of education and a negative correlation with regard of the length of the disease.

Conclusion: Schizophrenics generated fewer words on both tasks, positive symptoms being associated with more semantic deficits, negative symptoms with smaller clusters of words.

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Occupational capacity in schizophrenic psychoses—follow-up within the northern finland 1966 birth cohort

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Background and aims: We aim to study occupational capacity in schizophrenic psychoses by age 34 in a longitudinal population-based cohort. We aim to test if using various demographic and

illness-related variables we could predict those patients who despite of illness maintain their ability to work.

Methods: Subjects of the Northern Finland 1966 Birth Cohort with DSM-III-R schizophrenia ($N = 85$) and other schizophrenia spectrum cases ($N = 28$) by the year 1997 in the Finnish Hospital Discharge Register were followed for an average of 10.6 years. We predicted positive occupational capacity, measured with not being on pension at the end of the follow-up and being able to work (contributing to pension) at the end of the follow-up. Various illness and socio-demographic predictors at the time of onset of illness were used to predict occupational capacity.

Results: 46 (42%) of patients were not pensioned at the end of the follow-up time and 27 (24%) were also working during year 2000. After adjusting for gender, being unemployed at onset, educational level and proportion of time spent in hospitals and those who were married or cohabiting were less often on pension than those who were single at the time of onset of illness (OR 6.18; 95% CI 1.75–21.85).

Conclusions: Those who were married or cohabiting at the time of onset of illness were more commonly able to maintain their occupational capacity. Those who are single at time of their onset of illness need support to retain their contacts to work life.

P158

Substance abuse and religious coping among outpatients suffering from schizophrenia

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Background: Substance abuse represents a major issue in the treatment of patients suffering from schizophrenia. Spirituality and religious activities have been shown to reduce substance abuse in general population and to foster recovery among substance abusers.

The aim of the study was to assess the various roles of religion toward substance abuse in schizophrenia.

Method: 115 outpatients with chronic schizophrenia were randomly selected for a semi-structured interview about religious coping.

Results: At the time of the study, 25% of patients were current substance abusers, 21% had quit substance abuse. Religion played a protective role toward substance abuse in 14% of total sample, but also a negative role in 3% of cases, i.e. they used of substances to cope with spiritual distress and/or rejection from religious community. Positive role of religion was significantly higher for patients who stopped substance abuse (42% vs. 7%). Positive roles of religion were guidelines to live without toxic (7%), an alternative coping strategy replacing substance use (3%) or even a reorientation of the whole life toward spirituality (4%).

Conclusion: As it was already pointed out in research on substance abuse, religion often play a key role in recovery from substance abuse. This finding appears to be extendable to patients with dual diagnoses. These results underscore the need of a systematic exploration of religious issues in the care of patients with schizophrenia.

P159

Psychopathology and smoking in schizophrenic outpatients—preliminary study

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Introduction: Previous studies have shown high smoking rates in schizophrenic patients. In order to explain this association, it has been

suggested that smoking may be used by patients as a form of self-medication or that it may be a marker of a more severe illness process. Studies have shown disparity in results.

Objectives: Analyse tobacco smoking and nicotine dependence in a group of schizophrenic patients.

Identify clinical differences between smoking and non-smoking schizophrenic patients.

Analyse possible correlations between nicotine dependence and psychopathology.

Methodology: Transversal study.

Evaluation scales: Specific sociodemographic protocol; Positive and Negative Syndrome Scale for Schizophrenia (PANSS), Kay et al. (1987); Fagerström Test for Nicotine Dependence (FTND), Fagerström (1977).

Inclusion criteria: Schizophrenic outpatients (ICD-10).

Statistical analysis: Statistical Package for Statistical Science 13.0 (SPSS).

Results: Population: 50 male (71,4%) and 20 female (28,6%) schizophrenic outpatients (mean age of 39,4 years), with 57,1% of smokers.

Smokers group had earlier onset of illness than non-smokers ($P < 0.001$). No significant differences were found between the two groups for years of disease, number of hospitalizations or PANSS.

We found significant negative correlation between severity of nicotine dependence and two items of PANSS general psychopathology—somatic concern and lack of cooperation.

No significant correlation was obtained between nicotine dependence and PANSS positive or negative scales.

Conclusions: In our sample, only somatic concern and lack of cooperation were relevant for severity of nicotine dependence.

Reduced sample size and uneven gender distribution are important limitations of this study.

P160

Personal beliefs and schizophrenia: influence of beliefs about control over illness on post-psychotic depression

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Subject: This paper explores the link between patients' beliefs about control over their illness (health locus of control) and post-psychotic depression.

Thirty-eight patients with schizophrenia (DSM IV) were evaluated only well after their last acute psychosis. These patients were evaluated with the Psychotic Depression Scale. Twelve patients presented a post-psychotic depression (PDD group), 26 were not (non-PDD group). Residual psychotic symptoms and psychosocial abilities were also evaluated. Beliefs about control over the illness were assessed with the Personal Beliefs about Illness Questionnaire for the appraisal of beliefs about personal control, and the Form C of the Multidimensional Health Locus of Control Scale for the health locus of control.

Sociodemographic characteristics, psychopathologic antecedents, residual psychotic symptoms and psychosocial abilities of the two subgroups (depressive and non depressive subjects) were identical. There is a statistically significant link between some beliefs in control over illness and post-psychotic depression. Indeed, the PPD group was significantly more susceptible than non-PPD group to express a less personal control, a less internal control and a more control led by chance.

Since the present study explored the cross-sectional relationship between the beliefs about control over illness and post-psychotic depression, it is not possible to affirm the direction of the link between the beliefs and depression. Nevertheless, several hypotheses

were suggested: some compare the beliefs with factors of post-psychotic depression vulnerability (causes), others explain them as depression symptoms (consequences).

P161

Starting dose and persistence for ziprasidone users in medicaid

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Background: We determined the relationship between ziprasidone starting dose and persistence among patients diagnosed with schizophrenia.

Method: Adult Medicaid recipients diagnosed with schizophrenia and having ziprasidone prescription claims between 7/1/01 and 9/30/03 were categorized by starting dosage: low (20–60 mg) $n = 517$; medium (61–119 mg) $n = 339$; and high (120–160 mg) $n = 341$. Persistence was measured using refill patterns, allowing 15-day gaps between expected refill dates, and compared across starting doses using Chi-square tests. multivariate logistic analysis explored the simultaneous impact of age, gender, race, and year of treatment initiation, in addition to starting dose.

Results: Discontinuation rates across the study period (maximum 30 months) were greater for patients initiated with low ($P = 0.001$) and medium dose ($P = 0.02$) than for high dose patients. Discontinuation rates also higher in the low-dose group than in the high-dose group at days 365, 180, and 90 ($P < 0.05$). Multivariate analysis showed that, in addition to starting dose, African American race and a higher number of hospitalizations within 180 days of the initiation of ziprasidone also significantly predicted lower rates of persistence.

Conclusions: Schizophrenia patients started on high doses of ziprasidone had greater persistence up to 1 year than did those who start on low doses.

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The opus trial: a randomised multi-centre trial of integrated versus standard treatment for 547 first-episode psychotic patients

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Aim: To evaluate the effects of integrated treatment for first-episode psychotic patients.

Method: In a randomised clinical trial of 547 first-episode patients with schizophrenia spectrum disorders, effects of integrated treatment and standard treatment was compared. The integrated treatment lasted for 2 years and consisted of assertive community treatment with programmes for family-involvement and social skills training. Standard treatment offered contact with a community mental health centre. Patients were assessed at entry and after 1, 2 and 5 years by investigators that were not involved in treatment.

Results: At the 1-year and 2-year follow-up psychotic and negative symptoms changed in favour of integrated treatment. Patients in integrated treatment had significantly less co-morbid substance abuse, better adherence to treatment, and more satisfaction with treatment. Use of bed days was 22 percent less in integrated treatment than in standard treatment. Results of a 5-year follow-up will be presented.

Conclusion: Integrated treatment improved clinical outcome and adherence to treatment. The improvement in clinical outcome was consistent in the 1-year and 2-year follow-ups.

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Clinical consequences of switching antipsychotic drugs in outpatients with schizophrenia: 36-month results from the European Schizophrenia Outpatient Health Outcomes (SOHO) study

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Objectives: To study the impact of switching antipsychotic medications on the clinical status and tolerability outcomes in outpatients with schizophrenia treated with olanzapine and non-olanzapine antipsychotics

Methods: SOHO is a 3-year, prospective, observational study of health outcomes associated with antipsychotic treatment. 10,972 patients were enrolled. Since no instructions regarding treatment were included in the study description, patients could change medication following his/her doctor prescription at any time during follow up. Three groups of patients were defined: Patients who started olanzapine at baseline and changed treatment, patients who were treated with another antipsychotic at baseline and changed to olanzapine and patients who changed from and to a non-olanzapine antipsychotic. A logistic regression model was used to analyse the impact of the changes on response to treatment and tolerability. A sensitivity analysis was conducted using a more restrictive definition of switching.

Results: Patients switching to olanzapine were more likely to respond after the change than those patients switching from olanzapine (OR 0.537; 95% CI: 0.367, 0.787). Patients who switched to olanzapine were more likely to improve in terms of EPS and loss of libido compared to patients who switched from olanzapine [(3.79; 2.024–7.096) and (2.179; 1.231–3.857)] and those who switched neither from nor to olanzapine [(1.894; 1.212–2.9620) and (1.566; 1.042–2.352)]. There were not statistically significant differences amongst the three groups in terms of weight change, amenorrhea and impotence.

Conclusions: Patients who switched to olanzapine improved in terms of clinical status, EPS and loss of libido compared to other treatment changes analysed in our model.

P164

Factors associated with remission in schizophrenia: 36-month results from the Schizophrenia Outpatients Health Outcomes (SOHO) study

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Objectives: To analyse the frequency and factors associated with achieving remission during 3 years of treatment.

Methods: SOHO is a 3-year, prospective, observational study of antipsychotic treatment outcomes. Remission was defined as i) achieving a level of severity of mild or less (<4 in a scale from 1 to 7) in the CGI positive, negative, cognitive, overall severity score that had been maintained for 6 months or longer, and ii) Not having any inpatient admission during that period. A logistic regression model was used to analyse factors associated with remission

Results: 10,972 patients were enrolled and 10,218 patients were eligible for analysis at baseline; 6350 patients were included in the analysis and 4261 of them (67%) achieved remission. The most important baseline factors associated to achieving remission were: being never treated before baseline (OR 1.60; 95% CI 1.33–1.93), and having paid employment (1.49; 1.31–1.69). Higher CGI severity at baseline (0.76; 0.70–0.82), years since schizophrenia onset (0.99; 0.98–0.99), and male gender (0.79; 0.71–0.87) were associated to lower frequency of remission. Taking Quetiapine (0.66; 0.56–0.76), Risperidone (0.74; 0.66–0.83), Oral Typical (0.64; 0.55–0.74), Depot Typical (0.59; 0.50–0.69) and Amisulpride (0.73; 0.56–0.94) was associated to a lower frequency of remission compared to patients starting Olanzapine.

Conclusions: Most of the patients on outpatient treatment achieve remission. Employment status, lower clinical severity, female gender and treatment with Olanzapine were factors associated to remission. The results should be interpreted conservatively due to the observational study design.

P165

Effectiveness of antipsychotic treatment in outpatients with schizophrenia: 36-month results from the Schizophrenia Outpatients Health Outcomes (SOHO) study

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Objectives: To compare the relative effectiveness, in terms of treatment discontinuation, of olanzapine, risperidone, quetiapine, amisulpride, clozapine, oral and depot typical antipsychotic medications in outpatients with schizophrenia during a 3-year follow-up.

Methods: SOHO is a 3-year, prospective, observational study of health outcomes associated with antipsychotic treatment. 10,972 patients were enrolled in SOHO. The analysis includes the 7728 patients who started antipsychotic monotherapy at baseline. Treatment discontinuation was defined as discontinuing, adding to or switching the medication prescribed at baseline. A Kaplan Meier estimation of the time to medication discontinuation by treatment was plotted. The percentages of patients who discontinued treatment before 36 months were calculated from the Kaplan Meier estimation. A Cox proportional hazards regression model was used in order to adjust for baseline differences between treatments groups

Results: Approximately 42% of the patients discontinued the medication initiated at baseline before 3 years: quetiapine (66%), typical antipsychotics (53%), depot typical (50%) amisulpride (50%) and risperidone (42%). Clozapine (33%) and olanzapine (36%) were associated to the lowest medication discontinuation

A Cox regression showed that patients taking quetiapine (Hazard ratio 2.21; 95% CI: 1.95–2.5), amisulpride (1.62; 1.33–1.99), oral typicals (1.69; 1.46–1.96), depot typicals (1.42; 1.19–1.70) and risperidone (1.28; 1.16–1.42), had an increased risk of discontinuing their baseline medication compared to patients taking olanzapine.

There were no statistically significant differences between the olanzapine and clozapine groups (0.82; 0.65–1.02).

Conclusions: Treatment effectiveness varied among medications. Clozapine and olanzapine were the most effective in terms of the rates of discontinuation. Limitation: This is an observational not randomized study.

P166

Treatment with olanzapine increased volume of the caudate nucleus in patients with schizophrenia

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Objective: Dysfunction of the caudate nucleus is involved in a pathophysiology of schizophrenia because the caudate nucleus plays an important role in cognitive function. There are inconsistent reports on the caudate volume in patients with schizophrenia compared with healthy subjects. The reason of inconsistent reports is that neuroleptic medication may affect volume of the caudate nucleus in schizophrenic patients. To clarify which antipsychotic medication changes volume of the caudate nucleus in patients with schizophrenia, we measured volumes of grey and white matter in the caudate nucleus of schizophrenic patients.

Methods: Ten patients (five men and five women) with schizophrenia were examined twice by magnetic resonance imaging (MRI). MR data analysis was performed using BRAINS software in order to measure grey and white matter volume of the caudate nucleus. After the first MRI examination, all the patients were treated with olanzapine. Clinical response was evaluated by Positive and Negative rating scale (PANSS). When symptoms were improved, patients with schizophrenia were examined the second MRI scan.

Results: Volumes of grey and white matter in the caudate nucleus were increased after treatment with olanzapine in patients with schizophrenia. A reduction from baseline scores of PANSS was obtained in the patients. Conclusion: The findings of this study suggest that treatment with olanzapine may improve psychiatric symptoms through volume changes in the grey and white matter of the caudate nucleus in patients with schizophrenia.

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Un cas de possession de sa belle soeur

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La croyance dans la possession par les croyants était largement répandue en Europe et dans d'autres parties du monde. Elle constituait une théorie importante de maladie, surtout de maladie mentale. La psychiatrie, en général, regarde les croyances surnaturelles comme des tentatives du patient pour expliquer une expérience psychotique à partir d'éléments culturels.

Au Japon, bien que les pensées archaïques soient en train de s'affaiblir depuis les changements sociaux liés à l'évolution économique et l'occidentalisation rapide, elles fonctionnent encore dans notre vie quotidienne. C'est pourquoi, il existe encore des pathologies prenant le masque de la possession.

Nous présenterons un cas de possession et montrerons que ces symptômes que la pensée populaire rattache à la possession résument

la mentalité profane et provinciale des régions semi-urbanisées de notre pays.

Cas: une femme assidue, 52 ans, sans aucun antécédent familial et personnel, fut hospitalisée pour un épisode délirant dix jours après un décès de sa belle soeur avec laquelle elle était étroitement liée. Après un traitement par neuroleptiques, cet épisode psychotique qui comportait des thèmes de possession fut suivi par un état dépressif qui dura plusieurs mois.

Nous analyserons la pathologie sous certains aspects psychosociaux, comme la personnalité, la place culturelle du phénomène de la possession et la temporalité de cette communauté semi-urbanisée.

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Duration of untreated psychosis (DUP) and its relation to symptom improvement in patients who are treated with a cognitive-motivational program for the initial phase of schizophrenia: randomized controlled trial

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Objective: The aim of this study was to observe the differences of symptoms improvement between groups with a short or long DUP whether schizophrenic patients (initial phase) with addition of cognitive-motivational therapy specific program (PIPE) to treatment as usual (TAU).

Method: A total of 32 participants with initial phase of schizophrenia were randomized to receive either treatment as usual (TAU) ($N = 13$) or TAU + PIPE ($N = 19$). Of the total of sample 17 patients presented a short DUP (<24 weeks) and 14 had a longer DUP (>24 weeks). PIPE comprised individual and family Cognitive-Motivational therapy for 12 months (24 sessions). Clinical assessments were carried out at pre-treatment, during the intervention (quarterly), and post-treatment by external raters, using the PANSS, Brief Psychiatry Rating Scale (BPRS).

Results: Significant greater clinical effects were observed in patients treated in TAU + PIPE (pre-treatment, post-treatment) in all measurements of symptoms improve ($P > 0,01$). We observed significant improvement in positive symptoms in both groups: short DUP (Wilcoxon = -2.809 ; $P = 0.005$) and long DUP (Wilcoxon = -2.023 ; $P = 0.043$). Nevertheless, we only can observe significant improvement on the negative symptoms in the short DUP group (Wilcoxon = -2.7 ; $P = 0.007$). The group of longer DUP was better in negative symptoms after intervention but no significant differences were found (Wilcoxon = -1.481 ; $P = 0.066$).

Conclusion: These results show a greater impact of the TAU + PIPE on improving symptoms, in patients with initial phase of schizophrenia. Negative symptoms improve was recovered in patients who have a short DUP. So, the impact of the early intervention for schizophrenia depends partially of the duration of untreated psychosis.

P169

Perceived quality of life of chronic psychiatric patients living in community residential homes

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Introduction: The study concerns perceived quality of life of chronic psychiatric patients discharged from large psychiatric hospitals in

Greece, living currently in community residential homes, managed by EPAPSY-NGO.

Method: A modified form of Lehman's Quality of Life Interview was employed to assess quality of life in 34 psychiatric residents of community residential homes. Descriptive statistics were used to analyze the quantitative results. Qualitative methods were also used to analyze the open-ended data.

Results: Patients reported perceived satisfaction concerning living situation, social relations, leisure activities, work, finances, family relations, health, safety and life-generally in the residential home. Most of them reported preference for their current living and perceived improvement in their quality of life in all domains.

Conclusion: Transfer of care in community residential homes has a positive impact in patients' perceived quality of life. Quality of life is a crucial factor that should be assessed in order to evaluate and improve care provision.

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Evaluation of level of functioning and psychopathology of chronic psychiatric patients discharged from psychiatric hospitals

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Introduction: The study concerns the evaluation of rehabilitation process and psychopathology of long-stay psychiatric patients discharged from Greek psychiatric hospitals, living currently in community residential homes managed by EPAPSY.

Purpose: To evaluate the impact of community placement on behavioural and social functioning of chronic psychiatric patients as well as to assess the level of psychopathology 6 months after discharge from the hospital.

Method: Repeated measures design was employed to evaluate changes in behavioural and social functioning of 84 former psychiatric inpatients living in six residential homes. The scale of Rehabilitation Evaluation of Hall and Baker (1984) was used. The Positive and Negative Syndrome Scale (PANSS, Kay et al., 1987) was also used to evaluate psychopathology 6 months after discharge. Descriptive statistics and the Wilcoxon Test were used to analyze the results.

Results: Significant improvements were observed in total general behaviour ($P < 0.01$) in terms of social activity, self care skills and use of public facilities speech skills. Yet, there was an increase in some domains of deviant behavior ($P < 0.05$). Results on positive and negative symptoms, general psychopathology and aggression profile will also be presented.

Conclusion: Behavioral and social functioning of psychiatric patients was improved 6 months after discharge from psychiatric hospital. Evaluation should play an important role in individualized care planning and generally in the decision making process. It should also refer to other domains such as quality of life and quality of care provided and should be incorporated in the philosophy and practice of every mental health service.

P171

Effects of medication on executive functions in first episode psychosis

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Objectives: To assess the specific effects of atypical neuroleptics agents on executive functions in first episode patients with a fMRI study.

Methods: Among individuals with a first episode of psychosis ($n = 10$; mean of CPZ Eq = 121.43, S.D. = 26.73; mean of cumulative dose = 1660, S.D. = 428.17), psychopharmacological effects on executive functions were investigated with three fMRI paradigms: random movement generation task, N-Back verbal working memory task and overt verbal fluency task. The data were analysed using established non-parametric techniques in XBAMv3.4 (voxels P value = 0.05, clusters P value < 0.01, P error type I < 1)

Results: During the motor generation task, the treated group showed reduced engagement of left posterior cingulate, right cingulate and left inferior parietal lobule relative to the drug-free group, but greater activation in the right cerebellum and right postcentral gyrus. During the N-Back verbal working memory task the treated group showed greater engagement in the left lingual gyrus and less engagement in the right medial frontal gyrus and left inferior parietal lobule when compared to the drug-free group. During the verbal fluency task the treated group showed greater engagement in the left middle frontal gyrus and less engagement in the bilateral claustrum, left thalamus, right postcentral gyrus, left medial frontal gyrus, when compared to the drug-free group.

Conclusions: Atypical neuroleptics induced differential neural activations of executive functions in patients with a first episode of psychosis.

P172

Categorical weight and lipid improvements after switch to ziprasidone

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Background: We evaluated long-term and lipid changes after switch to ziprasidone in patients with schizophrenia who were obese or had at least borderline high lipid levels (NCEP guidelines).

Methods: Patients switched to ziprasidone from conventional antipsychotics ($n = 71$), olanzapine ($n = 71$), or risperidone ($n = 43$) in 6-week trials and completing these core studies entered 1-year extensions. Data from patients with BMI ≥ 30 , TChol ≥ 200 mg/dl, or triglycerides ≥ 150 mg/dl at core study baseline were analyzed to determine proportion experiencing categorical improvements: BMI < 30, weight reduction $\geq 7\%$, TChol < 200 mg/dl; triglycerides < 150 mg/dl. Analysis of observed cases at 58 weeks (endpoint) was used for all variables.

Results: Of patients with BMI ≥ 30 switched from risperidone or olanzapine, 25% and 15%, respectively, had BMI < 30 at 58 weeks; 59% and 35% had $\geq 7\%$ weight reduction. Patients switched from conventional antipsychotics exhibited lesser improvements. Among patients switched from conventionals, olanzapine, or risperidone who had baseline TChol ≥ 200 mg/dl, 50% had endpoint TChol < 200 mg/dl. Of patients with triglycerides ≥ 150 mg/dl, 42% of patients switched from risperidone, 33% switched from olanzapine, and 15% switched from conventionals had endpoint triglycerides < 150 mg/dl.

Conclusions: Significant proportions of overweight or hyperlipidemic patients switched to ziprasidone demonstrated clinically relevant long-term improvements in weight and lipids.

P173

Schizophrenic like presentation of hypothalamic hamartoma. Report of a case

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Psychotic symptoms—delusions, delusional misidentifications and hallucinations—are observed in a variety of organic and nonorganic conditions, and are, therefore, diagnostically nonspecific.

Hypothalamic hamartomas are rare developmental lesions generally associated with gelastic epilepsy and/or precocious puberty, usually diagnosed based on the patient's clinical symptoms and on Magnetic Resonance Imaging (MRI) characteristics.

We report on a case of a 19-year-old man admitted with a first psychotic episode, who later was found (on MRI) to have a hypothalamic hamartoma.

Although the hypothalamic hamartoma is mainly associated with epileptic manifestations in this case there were no signs of epilepsy.

The relationship between the neuro-radiological findings and clinical presentation has never been fully investigated but it is considered that hippocampus has the most suspectable relationship with the schizophrenia-like symptoms.

This case report attempts to review a number of hypotheses about underlying biological factors contributing to the development of psychotic symptoms of organic origin, with focus on possible etiological factors in schizophrenia.

P174

Impact of risperidone long-acting injectable on functioning in french patients

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Objective: To investigate the effect on patient functioning of a direct transition to risperidone long-acting injectable.

Methods: Adults with schizophrenia or other psychotic disorders who were clinically stable for ≥ 1 month but required a change of treatment, received risperidone long-acting injectable (25 mg, increased to 37.5 mg or 50 mg, if necessary) every 14 days for 6 months.

Results: Of 202 patients (70% male) with mean age 38 ± 12 years, the majority (86%) had DSM-IV schizophrenia (mainly paranoid). Previous treatments were atypical antipsychotics (64%), depot (34%) and oral (8%) conventional neuroleptics. The mean total PANSS score was significantly improved from baseline to treatment endpoint (79.4 vs. 68.3; $P < 0.001$), as was the score for the General Assessment of Functioning (54.3 vs. 61.1; $P < 0.001$). There were significant improvements ($P < 0.05$) from baseline to endpoint in mean scores for all factors of the SF-36, except Bodily Pain. Patient satisfaction with treatment also improved significantly ($P < 0.001$), with 31% rating it as 'very good' at endpoint compared with 8% at baseline.

Conclusion: Risperidone long-acting injectable significantly improved patient functioning, health-related quality of life and treatment satisfaction. It therefore provides a useful option for the management of patients with psychotic disorders.

P175

Compliance and schizophrenia : role of insight

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Noncompliance in schizophrenia is influenced by several factors including level of insight, and quality of therapeutic alliance. Objectives of this study is to explore the link between compliance, insight, and therapeutic alliance in a group of schizophrenic patients and to describe sociodemographic and clinical factors that might modify the compliance.

31 inpatients with schizophrenia and seven with schizoaffective disorders were included. Compliance was assessed using the Medication Adherence Rating Scale (MARS), the SUMD was used to measure level of insight, the quality of therapeutic alliance was assessed using a self rated questionnaire (SRQ) and a visual analogic scale (VAS). CGI, GAF and MINI section substance use disorders were evaluated.

Scores on MARS are correlated with scores on SUMD ($r = -0.45$; $P < 0.01$), and on self-rated questionnaire (0.66 , $P < 0.0001$). Self-rated questionnaire scores are correlated with SUMD ($r = -0.64$; $P < 0.0001$) and EVA ($r = 0.82$, $P < 0.0001$) scores. We found a significant association between ICG, compliance, insight and therapeutic alliance ($P < 0.05$), and between substance use disorders and poor compliance ($P < 0.01$). No significant association was found between compliance and sociodemographic characteristics nor regimen of psychotropic drug.

Lack of insight and poor therapeutic alliance seems to have a bad impact on compliance. Compliance is more influenced by the level of insight than by the regimen of psychotropic treatment. Compliance, insight and therapeutic alliance should be consistently assessed in clinical practice. Psychoeducational programs aimed at improving insight and information should be developed in order to improve medication adherence in schizophrenia.

P176

Schizotaxic liability and schizotypy: heuristic contribution of cognitive basic symptoms

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Objective: To investigate the frequency of Cognitive Basic Symptoms (i.e. subtle, not-yet-psychotic, anomalies of subjective experience of cognitive proficiency with complaint quality) in Schizotaxic (i.e. unaffected siblings of schizophrenics) and Schizotypal (i.e. Schizotypal Personality Disorder patients) subjects.

Method: Cognitive complaints in 18 individuals with Schizotypal Personality Disorder (SPD), 18 unaffected siblings of schizophrenics and 18 unrelated healthy controls matched by age and gender, were assessed with the Italian version of the Bonn Scale for the Assessment of Basic Symptoms (BSABS).

Cognitive Basic Symptoms (CBS) were condensed into clinically-plausible scales exploring perceived disturbances in “thought stream”, “thought directionality”, “memory performance” and “linguistic interaction”.

Results: SPD sample showed higher levels of all the CBS clusters than Controls and significantly overcome the unaffected siblings’ scores in the domains of interfered “thought stream” and inefficient “thought directionality”; unaffected siblings revealed higher degrees of “thought stream” disturbances than Controls.

Conclusions: Anomalous subjective experiences of cognitive proficiency found in SPD patients are also found in non-affected siblings. Among those, interfered “thought stream” shows a gradient-

like trend from controls to siblings and Schizophrenia-spectrum conditions and might be a suitable candidate for early diagnostic screening and clinically-grounded endophenotypic investigation. Self-perceived disturbances of “thought directionality” might be a subtle and clinically-accessible marker of the transition risk from schizotaxic (subclinical) liability to (overt) schizotypal disorder.

P177

Optokinetic nystagmus in schizophrenia

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Background: Oculomotor deficits are commonly found in patients suffering from schizophrenia. So far optokinetic nystagmus (eye movements elicited by motion of the visual scene; OKN) has not received as much attention as other types of eye movements such as saccades and smooth-pursuit. Importantly, in contrast to these OKN (by virtue of the reflexive nature) is not as much determined by cognitive and attentional factors themselves deficient in schizophrenia.

Methods: Seven antipsychotic-treated schizophrenic outpatients and 10 healthy control subjects viewed a regular pattern of vertical stripes moving horizontally at 30°/s and 60°/s on a panoramic screen. Eye movements were recorded by AC electrooculography.

Results: Mean gain, amplitude, and frequency of the OKN slow phases of the schizophrenic patients did not differ from the control subjects. However, variability of all these parameters was significantly higher in the patient group ($P < 0.005$ for all parameters and conditions). We found higher correlation between the amplitude and speed of OKN slow phases in the schizophrenic patients than in the controls ($P < 0.0001$). As compared to the controls, speed of two consecutive OKN slow phases was less correlated in schizophrenic patients ($P < 0.0001$). On the other hand, schizophrenic patients showed higher correlation between the amplitude of two consecutive OKN slow phases at 30°/s ($P < 0.0001$) and higher correlation between duration of two consecutive OKN slow phases at 60°/s ($P < 0.05$).

Conclusions: OKN was not severely impaired in the schizophrenic patients. However, our results suggest a pathological instability and inflexibility of the system generating optokinetic nystagmus in schizophrenia.

P178

Altered brain dynamics in first-episode schizophrenia revealed by EEG oscillatory activity

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The aim of this study was to study brain dynamics in sound detection and filtering out brain processes in first episode un-medicated schizophrenic patients as compared with a normal sample with EEG oscillatory activity.

Eight first-episode un-medicated patients with schizophrenia were consecutively recruited for this study from the Schizophrenia Unity of the Hospital of Bellvitge (Barcelona). All patients who were included met the DSM-IV criteria for schizophrenia or schizophreniforme

psychoses. The psychopathological symptomatology was quantified with the Positive and Negative Symptoms Scale (PANSS) by a trained psychiatrist. None of the patients suffered from other psychiatric or somatic disorders. Event-Related Potentials (ERPs) paradigm was performed analysing early stages of brain sound detection (N1 ERP) and gating processes by using single-trial time-frequency methodology. Further, attention, verbal learning and memory, speed of information and semantic fluency were explored.

Brain oscillatory patterns were altered in schizophrenic patients as compared to control subjects within theta and alpha frequency bands. Cognitive deficits in attention, verbal learning and memory, executive functions and speed of information processing were also shown.

Schizophrenics showed altered oscillatory brain activity in early stages of sound detection and sensory memory processes. It was also present an alteration to those functions that implied fronto-temporal correlates, a known cortical areas implicated in auditory sensory processing. It is hypothesised that neural network functioning (in terms of neural oscillatory activity) could reveal new insights in schizophrenia brain processing.

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P179

Evaluation of treatment with long-acting injectable risperidone during 24 months

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Background and aims: One of the most important targets in schizophrenic patients is compliance. Many authors think that non-compliance is the main problem they find in their clinical practice.

Several studies confirm that using long-acting injectables assures needing of institutional Psychiatric.

To evaluate the clinical impression and the activity of schizophrenia patients in treatment with long-acting injectable risperidone during 24 months.

To evaluate relapses that need institutional psychiatric care. During 24 months before and after the treatment with long-acting injectable risperidone.

Methods: 27 patients with schizophrenia.

Measures: Scale C.G.I. (clinic global impression).

Scale: E.E.A.G. (evaluation of global activity).

Results: By analysing the data obtained after 24 months of treatment, we found the following results:

1. It has produced an improvement in C.G.I of 1–13 points.
2. It has produced an improvement in E.E.A.G. with an increase of 10–11 points.
3. It has increased the number of patients with momotherapy by 350%.
4. It has decreased in 45% cases the need for hospitalization.

Conclusions: Treatment with long-acting injectable risperidone insurances a decreasing of relapses that need institutional psychiatric care and a clinical improvement of the schizophrenia patients. It insurances the compliance.

P181

Long-acting injectable risperidone versus zuclopenthixol in the treatment of schizophrenia with substance abuse comorbidity

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Substance use disorders (SUDs) are present in more than 50% of subjects diagnosed with schizophrenia. However, there are no controlled studies assessing the efficacy of antipsychotic drugs in this subgroup of patients. The objective of the present study was to compare the efficacy of long-acting risperidone and zuclopenthixol in subjects with schizophrenia and substance abuse. At the same time we aimed through this comparison to determine which antipsychotic drug would improve symptoms of schizophrenia and produce better compliance with the psychotherapeutic programme for reducing or ceasing substance use.

Method: A hundred and fifteen subjects with schizophrenia and SUDs were enrolled for an open, randomized, controlled, 6-month follow-up study.

Fifty-seven subjects were selected for treatment with long-acting injectable risperidone, while another 58 were treated with zuclopenthixol-depot. Substances most commonly used were alcohol (87%), cannabis (71%) and cocaine (26%). Psychopathological and clinical scales were used every 2 months. Participants received training on how to reduce their consumption of substances (Substance Abuse Management Module, SAMM).

Results: Long-acting risperidone group patients presented fewer positive urine tests, improved their scores on the PANSS and showed better compliance with the SAMM programme. Using long-acting risperidone and less severe dependence explained outcome at the end of the follow-up.

Conclusions: Long-acting injectable risperidone was more effective than zuclopenthixol-depot in improving substance abuse and symptoms of schizophrenia in subjects with dual diagnosis. Atypical antipsychotics could be the best pharmacological strategy in the treatment of subjects with schizophrenia and substance abuse comorbidity.

P182

Facial affect recognition in individuals at ultra-high risk for schizophrenia

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Background and aims: Problems in the perception of emotional material, in particular deficits in the recognition of fear and sadness, have been demonstrated in first-episode schizophrenia (Edwards et al., 2001). It is unknown if affect perception deficits predate illness onset.

Methods: We examined the capacity to recognize facially expressed emotion and affective prosody recognition in 35 individuals at ultra-high risk (UHR) for psychosis (according to criteria of Yung et al., 1998) (mean age = 16.1, S.D. = 1.9 years), 30 individuals with first-episode schizophrenia (mean age = 16.8, S.D. = 1.4 years), assessed as outpatients during the early recovery phase of illness, and 30 unaffected normal comparisons (mean age = 15.6, S.D. = 2.0 years). Facial tasks were computerised modifications of the Feinberg et al. (1986) procedure. Prosody tasks were developed by Edwards et al. using four professional actors. Emotion expressions included fear, sadness, surprise, anger, and neutral. For this analysis, we compared summary scores across communication channels, facial affect and affective prosody recognition, for each emotion and for a combined fear-sadness score.

Results: One-way ANOVAs revealed significant group differences for sadness, anger, and the combined fear-sadness score. Post hoc tests

indicated that compared to the control group both, UHR individuals and individuals with first-episode schizophrenia, were characterized by a significant deficit in the recognition of sadness, as well as a significant impairment on the combined fear-sadness score, but not for anger.

Conclusions: The findings suggest that specific emotion recognition deficits can be observed during the prodromal phase and emphasize a fear-sadness recognition deficit as a trait marker for schizophrenia.

P182

Hallucinations in unmedicated paranoid schizophrenia patients with and without history of pre-morbid substance abuse

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In our prior research, serum prolactin levels positively correlated with hallucinations that were mainly present in the disorganized forms of the disease, and negatively correlated with the prominent paranoid symptoms of suspiciousness/persecution.

In the present study we assessed the differences between two groups of consecutive admitted unmedicated paranoid schizophrenia patients: Thirteen were with reported past cannabis (seven) and alcohol (six) abuse that chronologically preceded psychosis that lately became paranoid schizophrenia and the twenty-three were with no known history of substance abuse.

We evaluated the clinical symptoms by the PANSS items. The dopamine pattern of activity was measured by prolactin serum levels and compared with those of 28 unmedicated disorganized schizophrenia patients.

The results reconfirm our previous reports: The prolactin levels of paranoid patients were obviously lower than of the disorganized ones, with no difference between the two paranoid subgroups. The only PANSS item that achieved significant difference between the paranoid patients with and without substance abuse history was P3-hallucinations: The paranoid patients with no history of substance abuse scored almost "absent" (mean = 1.26); those with history of cannabis or alcohol illustrated "mild" hallucinations and scored (mean = 3.07) on the P3 item.

The present results seem to indicate subcortical hyperdopaminergic consistent with the pattern of relative low prolactin serum levels and explain the paranoid suspiciousness/persecution for the whole paranoid patients. Those with history of substance abuse may suffer from a hypodopaminergic activity of toxic-degenerative origin in the prefrontal cortex that could elucidate the residual and persistent hallucinations.

P183

EEG coherence following single dose of aripiprazole in patients with schizophrenia

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Pharmaco-EEG is a developing field with newer technology in acquiring higher resolution EEG that may facilitate in understanding the pharmaco dynamics. EEG coherence is the index of the degree of synchronicity of neuronal signals between two recording regions, high coherence between two EEG signals being interpreted as evidence of a

strong functional and/or structural connection between two brain regions.

Aripiprazole is an atypical antipsychotic with unique mechanism of action, a partial agonist at D2 and 5HT1A receptor and antagonist activity at 5HT2A receptors, with a favourable safety profile than typical antipsychotic.

Objective: To study the change in power spectrum and coherence in various bands after a single dose of Aripiprazole as a predictors of short-term outcome (after 4 weeks) on Aripiprazole in patients with schizophrenia.

Method: Power spectrum and coherence in delta (1–4 Hz), theta (5–8 Hz), alpha 1 (9–10 Hz), alpha 2 (11–12 Hz), beta 1 (13–18 Hz), beta 2 (19–20 Hz), beta 3 (21–30 Hz), gamma 1 (30–100 Hz), gamma 2 (30–130 Hz) using 64 channel were observed in 32 schizophrenics patients (ICD-10 DCR) at baseline, and after (4–5 h) single dose of aripiprazole, assessed with Positive and Negative Syndrome Scale (PANSS) and Brief Psychiatric Rating Scale (BPRS) at baseline and 4 weeks on Aripiprazole.

Conclusion: The study reports that Aripiprazole is an efficacious drug in patients with schizophrenia. The intrahemisphere coherence is a good predictor of an outcome, particularly in the left hemisphere in delta band, right intrahemisphere in theta band and beta band.

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Higher health resources utilization and outpatient costs of mental disorders in the primary health care setting: a Spanish perspective

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Objectives: To measure the economic impact of mental disorders (MD) and associated comorbidity in a population treated in the primary care setting (PCS) under usual clinical practice conditions.

Methods: Retrospective cohorts study. Study cohort was formed with outpatients aged over 14 years with an established diagnosis of MD (ICPC-2: component 7) treated in a PC health area during year 2004. Comparative cohort was formed with the rest of outpatients without MD assisted in that health area. Main measurements were: age, gender, history/comorbidity and health resource utilization and its corresponding outpatient costs; drugs, diagnostic test, specialized and PC physician visits. Multiple logistic regression analysis and ANCOVA models were used to compare total and components of costs and comorbidities between cohorts of patients.

Results: A total of 64,072 subjects were assessed; 11,128 patients with MD [17.4% (CI: 16.7–18.1%)]. Although MD outpatients showed higher number of episodes of comorbidities/year (mean±SD; 6.7±3.9 vs. 4.7 + 3.3, $P < 0.0001$) and all-type medical visits/patient/year (10.7 ± 9.0 vs. 7.2 + 7.6, $P < 0.0001$), MD was associated with significant higher total costs; adjusted annual mean extra cost per patient of €72.7 (95% CI: +€59.2–+€85.9, $P < 0.0001$). All components of outpatient management costs (drugs, diagnostic procedures, specialist and primary care physician visits) were higher in MD cohort; adjusted differences of €29.3 (€17.5–€41.2), €10.7 (€10.1–€11.4), €4.1 (€3.0–€5.1) and €28.5 (€25.5–€31.4); $P < 0.0001$ in all cases.

Conclusions: Outpatients with MD, even more likely to have comorbidities than non-MD subjects, were associated to higher costs and health care resource utilization in the PC setting in Spain.

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Smoking and smoking-cessation in people with chronic schizophrenia

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Background: People with schizophrenia show high rates of nicotine dependence. Little is known, however, on smoking cessation behaviour and on the needs patients have to help them give up smoking.

Aims: To describe smoking habits and smoking-cessation in people with schizophrenia and to report on the needs patients have to help them give up smoking.

Method: Smoking and smoking-cessation behaviour was assessed in 108 inpatients with chronic schizophrenia.

Results: of the patients, 79 (73%) were current smokers 53 (67.1%) men and 26 (32.9%) women), 16 (14.8%) had given up smoking and 13 (12%) had never smoked. Thirty-seven (46.8%) of current smokers were heavy smokers (≥ 25 /day), and 42 (52.5%) fulfil Fagerström criteria for nicotine dependence. Seventy-one percent ($N = 57$) of current smokers attempted smoking cessation, on average 2.6 times. Two-thirds ($N = 52$, 65.8%) of patients say they want help at smoking cessation. In order of importance, measures that patients perceive as helpful were social support (45.6%), individual counselling (36.7%), physical exercise (35.4%), group counselling (26.6%), nicotine patches (25.3%) and bupropion (21.5%). Of the patients who had given up smoking, however, only 25.3% used one or more of these measures.

Conclusions: A high proportion of individuals with chronic schizophrenia smoke heavily and are nicotine dependent. However, many of these patients want to give up smoking and have attempted to do so on several occasions. More than 60% of smokers express the desire to receive help at smoking cessation. Clinicians should acknowledge this desire and should offer schizophrenic patients adequate help.

P186

The efficacy of treatment with classic and atypical antipsychotic in relation to attention impairment in schizophrenia

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Background: Cognitive and attentional deficits description of schizophrenia impairs social and vocational functioning. The medication which improves cognition in schizophrenia can help in achieving better functional outcome.

Objectives: To rate the efficacy of treatment with classic (haloperidol) and atypical (risperidone, olanzapine) antipsychotics in relation to attention impairment in patients with schizophrenia.

Material and methods: 60 patients with schizophrenia according to ICD 10 and 30 matched controls were analyzed. Patients were divided into two groups of 30 persons. The patients in every group received 6 weeks monotherapy with risperidone, olanzapine or haloperidol. The psychiatric symptoms of schizophrenic patients were evaluated using Brief Psychiatric Rating Scale (BPRS) and attention with Trail Making Test A in first weeks of treatment and after 6 weeks.

Results: Schizophrenic patients had significantly larger values ($P = 0.0001$) than controls for time spent to complete the task. There was no significant difference between the 2 groups of patients at the beginning of treatment ($P = 0.54$). There was a statistically significant ($P < 0.05$) improvement of attention following treatment with atypical antipsychotic in comparison with the patients on haloperidol.

Conclusion: These results confirm the poor performance on attention task of schizophrenic patients. Treatment with atypical antipsychotics results in a decrease in the severity of attention impairment.

P187

Are psychotic patients admitted to general hospitals only on an emergency basis?

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Background and aims: Psychotic patients have a precarious somatic health. The study investigate whether in the Clinic Emergency Hospital Timisoara, Romania, the stigma associated with mental illness reduces the admittance, especially to medical wards, and whether psychotic patients receive in the general hospital the appropriate medical care they need.

Material and method: A retrospective analysis was applied to all consecutively admitted, non-affective psychotic patients referred to liaison psychiatrists. The time span covered is May 2002–March 2005. Patients were assessed using a routine psychiatric interview and diagnosed according to the ICD-10 criteria. Demographical data and the medical or surgical diseases were recorded.

Results: 89 (3.56%) of the total 2494 patients referred to in the above-mentioned period met the criteria for endogenous psychosis (F 2): schizophrenia 42, persistent delusional disorder 25, acute and transient psychotic disorder 15, schizoaffective disorder four, and other non-organic psychotic disorders three patients. Demographical data showed a sex ratio between men/women of 1/1.19, and mean age 45.2. 36 referrals were from surgical wards (orthopaedics and politraumatology 20, surgery 11, and urology 5), and only 31 from medical wards. Thirteen patients were consulted from the intensive care unit and nine patients from the emergency room.

Conclusion: In Romania, psychotic patients are usually admitted to general hospitals in a very low rate and mostly in case of an emergency, or of a life-threatening situation. The presence, or even a suspicion, of a serious mental illness has a negative impact on health care in the general hospital setting.

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Clinical status course and quality of life after the first 1 year of treatment: Greek results from the European Schizophrenia Outpatient Health Outcomes (SOHO) study

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Objective: To describe the clinical status and quality of life (QoL) of Greek schizophrenic outpatients treated with olanzapine versus other antipsychotics over 1 year.

Background: European SOHO is a prospective, observational study of antipsychotic treatment in 10 European countries.

Methods: Clinical effectiveness and QoL were assessed using the Clinical Global Impression (CGI) scale and the EQVAS instrument, respectively. The results that follow have been calculated by analysing treatment outcomes of SOHO patients who, from baseline to 12 months of follow-up, had only received the same monotherapy antipsychotic treatment (completers).

Results: Olanzapine-treated patients had higher benefit in overall CGI improvements (mean; 95% CI) during the first 12 months,

compared with risperidone (2.51; 1.16–5.44), but not with quetiapine (1.16; 0.17–7.5) and oral typicals (1.6; 0.24–10.8) treated patients.

Olanzapine-treated patients had no significant differences in EQVAS improvements during the first 12 months compared with other treatments.

Conclusion: During the first 12 months of treatment olanzapine appears to have superior efficacy advantages compared with risperidone, but not with quetiapine or typical antipsychotics on clinical grounds. There was no differentiation between olanzapine and other typical and atypical antipsychotics regarding EQVAS score changes.

Limitations: This is a non-randomized study.

P189

Impaired prosodic discrimination in patients with schizophrenia

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Introduction: Prosody, the non-verbal part of oral-communication has been shown to be deficient in patients with schizophrenia, though less work has been performed on the more elementary prosodic sub-components of pitch and timing.

Methods: 15 patients and 15 controls undertook a prosodic task, deciding if lexically matched sentence pairs or their musical (non-verbal) analogues were identical or differed on one of three attributes: terminal-pitch, internal-pitch or timing-shift changes.

Results: Patients showed a significant reduction in the accuracy of internal-pitch discrimination versus controls in both tasks. There were no differences in the patients' abilities to detect terminal-pitch changes in either form. Patients did demonstrate a non-significant decrement in the accuracy of timing shift change detection in both. Accuracy of the internal-pitch discrimination of sentence, but not music, pairs was negatively correlated with positive symptom score in patients.

Discussion: Our findings suggest patients with schizophrenia have a deficit in discriminating fundamental acoustic features underlying prosodic perception. Patients show deficits during the internal-pitch discrimination in both tasks.

As similar results were not obtained for internal timing changes, this suggests that the deficit is not one primarily of working memory.

Correlation analysis showed that the disturbance of internal-pitch discrimination on the sentence task was associated with positive psychotic symptoms.

Thus a specific prosodic deficit might contribute to the genesis of positive psychotic symptoms.

Similar performances on the sentence and music tasks adds to the idea of shared common neural resources in the processing of pitch and timing.

P190

Differential diagnosis of schizophrenic febrile psychoses

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Increase of variety of atypical neuroleptics didn't solve the problem of life-threatening neuroleptic-induced complications such as malignant neuroleptic syndrom, generalized allergic reactions. Similarity of clinical presentations between spontaneous febrile psychoses and those

caused by medicinal complications, arise, significant diagnostic hardships. At the same time life of the patients with schizophrenia with febrile psychoses depends on the early diagnosis and adequacy of the conducted therapeutical measures. Prolongation of neuroleptic therapy in patients with developed drug-induced complications results in lethal outcomes in the majority of cases. Differential diagnostic criteria were revealed on the basis of comparative study of 71 patients with febrile schizophrenia and 93 patients with neuroleptic-induced complications.

Autochthonous tendencies of the process and neuroleptics' influence on the schizophrenic psychoses' currency were considered for differentiation of febrile psychoses by origin.

First signs of neuroleptic-induced complications in comparison to febrile schizophrenia proved to be apparition and abrupt enhancement of moderate side extrapyramidal symptoms in spite of the effected therapy by correctors. 2–3 days before the temperature rise in patients with neuroleptic-induced complications we observed exacerbation and complication of psychopathological symptoms by the model of extrapyramidal-psychotic exacerbation. Febrile period of these complications coincided with catatonic disturbances. As a rule during first days of febrile period in patients with neuroleptic-induced complications one could observe recurring change of catatonic symptoms and extrapyramidal disorders that has never been typical of patients with febrile schizophrenia if they were not treated by neuroleptics before the onset of febrility.

P191

Amino acids and dimensions of psychoses

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Liddle was the first who showed in 1987 that three psychopathological dimensions underlie the symptomatology of chronic schizophrenia. Subsequent factoranalytical studies demonstrated various symptomclusters depending on the methods of assessment, type of patients and the statistical procedures used. The dimensional model of psychoses turned out to be more fruitful in terms of external validity than the categorical model (1). Especially functional outcome measures and service utility are better predicted by symptom dimensions than categorical diagnoses.

Over the past years it has been repeatedly found that dimensions of psychopathology in psychotic disorders can be related to biochemical parameters such as plasma level of glutamate or amino acid ratios. These findings may reflect the glutamatergic activity in the central nervous system because of the linear correlation between levels of this amino acid in plasma and cerebrospinal fluid.

In the present study comprising 100 consecutively admitted psychotic patients, dimensions of psychoses were assessed with an explanatory factor analysis using the CASH, OPCRIT, PANSS, CPRS and the Bush-Francis catatonia scale. In all patients plasma levels of amino acids were measured under standardized conditions.

The results indicate that plasma levels of glutamate may be a predictor of outcome and that the ratio of amino acids may be related to affective symptomcluster.

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P192

Visual mismatch negativity in patients with schizophrenia—preliminary data

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Objective: Mismatch negativity (MMN) is an event related potential that measures the cortical activity occurring in response to a change in the stimulus sequence. Deficits in MMN generation in auditory domain have been repeatedly demonstrated in schizophrenia. Our object is to explore MMN in visual domain.

Subject and method: We examined 14 patients with first episode of schizophrenia and 14 healthy controls. Two different types of information discriminates between standard and deviant stimuli in our visual MMN paradigm: motion direction and sequence of two motions in periphery of the visual field. The overt attention was controlled by the detection task in the central part of the visual field.

Results: Statistically significant ERP differences between standard and deviant conditions were found for both types of stimuli. The negative deflection of ERP at 145–260 ms for the deviant conditions was recorded as a result of motion changes in periphery, while the subject paid attention to the centre of the visual field. There were no differences between the groups in response to standard stimuli. However, in response to deviant stimuli the group of controls displayed significantly more negative amplitude, predominant in occipital area at 120–400 ms.

Conclusion: The preliminary results support a possibility for clinical utilization of the visual mismatch negativity in study of visual information processing in schizophrenia. The results of the study suggest that the deficit of information processing in schizophrenia is not restricted only to auditory modality.

P193

The effect of occupational therapy on negative symptoms in schizophrenia

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Background and aims: Schizophrenia is one of the most important and disabling mental disorders in all over the world. In US, about 1% of total budget is spent on it. Schizophrenic patients occupy about 50% of hospitals beds, something about 16% of all mental Patients. As one of the most important of treatments in this disorder is occupational therapy, the present study aim is defining the effect of occupational therapy on negative symptoms of patients with schizophrenia.

Methods: This study is a clinical Trial and the samples were composed of 84 schizophrenic patients hospitalized in psychiatric wards of Farabi hospital in Isfahan, selected through convenient sampling. The data were collected by a standard questionnaire to investigate negative symptoms (SANS). The data were analyzed by pair-t test, wilcoxon tests through SPSS software.

Results: Regarding the aim of the research, the findings showed that occupational therapy activities decrease the mean scores of schizophrenia negative symptoms included affective flattening, avolition, self-care deficit, avolition and anhedonia ($P < 0.001$).

Conclusions: The findings of the research have shown that occupational therapy and rehabilitation can decrease self-care deficit and other negative symptoms of patients with schizophrenia and finally promote Patients' general status. So occupational therapy providing

more facilities, making appropriate decisions and providing clinical environments in which occupational therapy process can be facilitated for the patients are all suggested to nursing authorities.

P194

Relationships between different predictors of schizophrenia

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The aim of our study is to consider the relationships between the signs proposed to indicate a predisposition to schizophrenia, i.e. subjective experiences and schizotypy. Subjective experiences are self-appreciation by the patients of their own cognitive and sensorial alterations. These symptoms are also called “basic symptoms” (Huber et al., 1980; Klosterkötter, 1992). Subjective experiences can be regarded as the subjective side of the pre-existing neuropsychological deficit in schizophrenia. The concept of schizotypy (Meehl, 1962) has been proposed to refer to individuals who possess an underlying vulnerability to schizophrenia which encompass anhedonia, ambivalence, cognitive slippage and interpersonal aversiveness.

We studied the relationships between subjective experiences and schizotypy. Subjective experiences were evaluated by the authors' French translation of the third version of the Frankfurt Complaint Questionnaire (FCQ, Loas et al., 1997). Schizotypy was evaluated with the Chapman scales (Physical anhedonia, Social anhedonia, Perceptual aberrations, Magical Ideation), the Cognitive Slippage and Schizotypal Ambivalence scales, widely used for this assessment.

A total of 399 subjects without any psychiatric history were recruited (students).

The analysis show a good correlation between the FCQ and the Chapman scales, except the Physical Anhedonia Scale. Moreover, a multivariate analysis show that an important part of the FCQ's variance (69.1%) is explained by the Cognitive Slippage Scale.

P195

Raising high school students' awareness about the stigma of schizophrenia

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The Greek program against stigma and discrimination because of mental illness designed an educational intervention for high school students. This program, which is under the umbrella of the World Psychiatric Association, is run in Greece by the University Mental Health Research Institute (EPIPSI). The educational intervention addressed high school students of an age of 13–15 years aiming to raise awareness about the stigma of schizophrenia. The total number of students that participated in this intervention was 655 (51.1% boys and 48.9% girls). The intervention lasted 2 hours in the classroom and was based on guided discussions, the students' active participation and creative activities. The students had the chance to get information on the myths that surround schizophrenia, develop a respectful use of language when addressing matters that concern schizophrenia, learn about stigma busting and express inner feelings and thoughts towards people that have schizophrenia through a collective creative experience. Furthermore, through this intervention the students' knowledge, beliefs and the level of social distance towards people with schizophrenia were assessed before and after the intervention. The results showed both an improvement of the students' knowledge concerning issues of schizophrenia and a decrease of negative stigmatising attitudes that indicate the level of social distance. The

implementation of this educational intervention on a national level in Greece is in progress.

Poster session 1: Sleep disorders

P196

Twelve months of nightly eszopiclone treatment in patients with chronic insomnia: assessment of long-term efficacy and safety

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Background: In a 6-month placebo-controlled study, eszopiclone demonstrated efficacy in improving measures of sleep and patient-reported daytime function. To evaluate continued effectiveness and safety, a 6-month open-label extension study in actual practice was conducted; results are presented here.

Methods: Following the 6-month, double-blind phase, 471 patients (111 placebo, 360 eszopiclone) entered the extension and received open-label eszopiclone 3 mg nightly (months 7–12). Endpoints were patient-reported measures of sleep efficacy (onset, maintenance, duration, quality) and daytime parameters (alertness, physical well-being, and ability to function [concentrate]), captured weekly using an interactive voice response system. Data from double-blind treatment month 6 were used as “baseline” for this analysis.

Results: Patients previously treated with placebo reported immediate and significant improvements in sleep and daytime function (all *P* values < 0.0005 versus baseline). Patients who previously received eszopiclone continued to improve (e.g., *P* < 0.02 for total sleep time for months 7–12). These improvements in sleep and daytime function were sustained for the entire 6-month extension period. At the end of the extension, 86/111 patients (77%) had received eszopiclone for 6 months, and 296/360 patients (82%), for 12 months. There were no significant withdrawal adverse events upon discontinuation; eszopiclone was well-tolerated for up to 12 months of nightly use.

Conclusions: In this study, patients with chronic primary insomnia treated with eszopiclone reported improvement in measures of sleep and next day functioning that were sustained over the extension period without evidence of tolerance in most patients.

Support for this study provided by Sepracor Inc.

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More evidence for the relevance of the ‘morning affect’ component of morningness

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Background: The personality trait of Morningness can be measured by self-questionnaires such as the Morningness–Eveningness Questionnaire (MEQ) and the Composite Scale of Morningness (CSM). The structure of these instruments has been scarcely assessed in the literature, though more than one factor intuitively composes the construct. We have recently shown that the “Morning Effect” factor, extracted from the CSM, is stable across gender and culture (*N* = 2877). We suspected that the same factor would be identified among the items of the MEQ.

Method: Up-to-date exploratory factor analysis was used in a sample of French-speaking students who completed both the MEQ and the CSM (147 males and 273 females).

Results: The range of age was 17–40 (22.77 ± 3.89). The correlation between MEQ and CSM indicates that the total scores

essentially measure the same construct (*r* = +0.904, *N* = 420). Several factorial solutions (3-, 4- and 5-factor) were examined in both genders. In all situations, the “morning effect” constantly emerged while the composition of the other factors was affected by gender and the number of factors extracted.

Conclusion: The “Morning Affect” factor has been robustly identified among the 19 items of the MEQ as it predicted from our previous work. The validity of this factor needs to be evaluated. Reference: Caci H, Adan A, Bohlé P, Natale V, Pornpitakpan C, Tilley A (2005) “Transcultural properties of the Composite Scale of Morningness: the relevance of the Morning Affect factor”, *Chronobiology International*, 22(3), 523–540

P198

Four studies of eszopiclone in non-elderly and elderly patients with chronic insomnia

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Background: Insomnia affects about 36% of adults and prevalence increases with age. Eszopiclone is a non-benzodiazepine that has been shown to rapidly induce and maintain sleep in patients with insomnia.

Methods: Data are from randomized, double-blind, placebo-controlled studies of eszopiclone: two 2-week studies of eszopiclone 2 mg in elderly patients (PSG study, *n* = 264, subjective study, *n* = 160), and two non-elderly studies utilizing eszopiclone 3 mg (6-week PSG study, *n* = 204; 6-month subjective study, *n* = 788). Each evaluated sleep onset, duration, and maintenance (wake after sleep onset–WASO) in patients with primary insomnia.

Results: Eszopiclone significantly improved patient reports of sleep (onset, *P* < 0.01; WASO, *P* < 0.05; total sleep time, *P* < 0.01) compared with placebo over the study period in elderly and non-elderly patients. In the two PSG studies, eszopiclone significantly improved total sleep time, sleep onset, sleep efficiency, and WASO in both populations (*P* < 0.05). In all studies, eszopiclone patients reported improvements in measures of next day function.

Conclusions: The data from these four studies indicate that eszopiclone provided consistent improvements in patient-reported and PSG measures of sleep in non-elderly and elderly patients with chronic insomnia. Notably, consistent improvements in patient ratings of daytime functioning were also reported.

Support for this study provided by Sepracor Inc., Marlborough, MA

P199

La tentation de faire dormir la crise: réflexions sur la prescription d’hypnotiques et sédatifs

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Soit à l’occasion de consultations aux urgences ou dans les pavillons de l’hôpital, soit à l’occasion d’activité ambulatoire dans son cabinet, très souvent le psychiatre se trouve tenté, face à une situation de crise psychopathologique et/ou relationnelle, à résoudre ce déclenchement en prescrivant des médicaments hypnotiques et sédatifs.

Nous pouvons proposer des significations différentes à cette attitude. D’une part nous pouvons penser être face à un raccourci qui nous pousse à mettre sous silence, d’une façon non réfléchie, la polysémie de la crise en la banalisant: le psychiatre en ce cas n’est plus celui qui comprend et accueille la souffrance et aide le patient à en apercevoir le sens et, si possible, l’origine. Au fond nous retrouvons là

la différence entre avoir souci d'autrui et soigner: dans le premier cas le psychiatre reconnaît le patient comme un sujet (temporairement affaibli, peut-être moins libre), tandis que dans le deuxième cas le psychiatre risque de réduire le patient à un objet de techniques médicales. Mais d'autre part, nous pourrions reconnaître dans l'administration d'hypnotiques la tentative d'apaiser la crise en modifiant sa forme, mais sans effacer ses contenus et en permettant au patient de reprendre haleine. En adressant notre attention sur cette tentation hypnotique et sédative, nous nous proposons, à partir de vignettes cliniques, de mettre en lumière les fonctions de cette attitude et ses conséquences sur la relation thérapeutique.

P200

Chronic insomnia in primary care: psychiatric and clinical characteristics

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Background and aims: Chronic insomnia (ChI) is a common condition in Primary Care (PC). In spite of its often related to psychiatric morbidity it appears to be a strong predictor of future depression and a disabling disorder by itself. The aim of this study was to measure clinical and psychiatric characteristics of both patients with primary ChI and secondary ChI.

Methods: A random sample of 195 subjects older than 18, from three PC Centres of the area of Madrid (Spain) was interviewed using the Oviedo Sleep Questionnaire. The subjects completed the Patient Health Questionnaire and a recent life changes checklist. Data about medical conditions, drug treatments, days of work lost and use of health care services, were also collected. Psychiatric and clinical characteristics between groups (primary ChI, secondary ChI and no insomnia subjects) were compared.

Results: 69 patients fulfilled ICD-10 criteria of ChI and 46 (66.7%) of them were suffering from any psychiatric disorder (including subthreshold conditions). Patients with ChI compared to no insomnia patients had a higher use of health care resources, more days of work lost, more life events during the last 6 and 12 months and more somatic and depressive symptoms. No differences were found in "days of work lost" and "visits to any health care service" between patients with primary ChI and secondary ChI.

Conclusions: There is an important group of patients among PC attendees suffering primary ChI. Patients suffering primary ChI show a considerable clinical impairment in terms of somatic and depressive symptoms.

P201

Lack of REM sleep behavior disorder in familial tauopathy

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Background: RBD is a parasomnia that is manifested by dream enactment behavior. The electrophysiologic substrate for RBD on polysomnography (PSG) is REM sleep without atonia (RSWA). RBD likely stems from neuronal network dysfunction in the brainstem, although it is not yet clear which specific networks are involved. RBD is often associated with the sporadic

synucleinopathies but rarely associated with the sporadic tauopathies. There are no reports on the possible association of RSWA and RBD with familial tauopathy.

Methods: We performed standard PSG in 11 members of the PPND kindred irrespective of any sleep-related complaints. Neuropathologic findings were analyzed in those who subsequently underwent autopsy.

Results: Six affected and five genealogically at risk family members were studied. None of the 11 had a history of dream enactment behavior. Nine of the 11 members attained sufficient REM sleep on PSG, and the electrophysiologic features of RSWA and behavioral manifestations of RBD were absent in all subjects. Neuropathologic examination in four affected individuals revealed marked nigral degeneration in three along with mild degenerative changes in the locus ceruleus, pontine nuclei and tegmentum, and medullary tegmentum.

Conclusions: These findings argue against nigral degeneration being the primary cause of RBD. The absence of the historical, electrophysiologic, and behavioral manifestations of RBD in this kindred provides further evidence that RBD is rare in the sporadic and familial tauopathies. The difference in frequencies of RBD associated with the synucleinopathies compared to the tauopathies suggests differences in the selective vulnerability of brainstem circuits between the synucleinopathies and tauopathies.

P202

Co-administration of eszopiclone and fluoxetine in major depressive disorder and insomnia: depression effects

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Background: Insomnia can co-exist with depression. This study evaluated eszopiclone and fluoxetine co-administration in depressed patients with co-morbid insomnia.

Methods: Patients who met DSM-IV criteria for new MDD and insomnia received fluoxetine 20 mg QAM plus either eszopiclone 3 mg ($n = 275$) or placebo ($n = 270$) nightly for 8 weeks. Efficacy was assessed using HAMD17 and Clinical Global Impression Improvement (CGI-I) and Severity (CGI-S). Response = at least 50% decrease from baseline HAMD17; remission = HAMD17 ≤ 7 .

Results: Eszopiclone co-administration resulted in significantly greater changes in HAMD17 scores at Week 4 (-9.9 vs. -8.5 for placebo, $P = 0.02$) with progressive improvement at Week 8 (-13.8 vs. -11.8, $P < 0.001$). At Week 8, significantly more eszopiclone patients were responders (74% vs. 61%, $P < 0.009$) and remitters (54% vs. 41%, $P < 0.02$). Even after removing insomnia items, significant changes in HAMD17 were found at Week 8 ($P < 0.03$). HAMD17 differences were greater in patients with more severe depression (baseline HAMD17 ≥ 22). CGI-I and CGI-S scores were significantly greater with eszopiclone co-administration ($P < 0.05$). Fewer eszopiclone patients required fluoxetine dose increases (44% vs. 54%; $P < 0.05$). Treatment was well-tolerated; drop-outs due to AEs were comparable.

Conclusions: Eszopiclone/fluoxetine co-administration significantly augmented the antidepressant response in patients with MDD and insomnia. The sleep response occurred immediately, followed by augmentation of the antidepressant response.

Support for this study provided by Sepracor Inc., Marlborough, MA

P203

The discontinuation of 3rd generation of hypnotics and antidepressant medication in the cognitive-behavioural therapy of chronic insomnia

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Objectives: The aim of study was objectively evaluate the effect of the 3rd generation hypnotics discontinuation in the results of cognitive-behavioural therapy of chronic insomnia. The second aim of the study was the evaluation of the therapeutic effect of antidepressant therapy as add-on treatment in the CBT of chronic insomnia.

Methods: Altogether 28 out-patients with non-organic insomnia were included in the study. Before and after therapeutic period a whole-night polysomnography was done. The 3rd generation hypnotics were discontinued in sub-group of 15 patients, 16 patients were newly treated with antidepressants. The therapeutic effect was evaluated by means of paired-sample *t*-test and ANOVA with the standard polysomnographic variables obtained before and after therapy.

Results: In whole group of 28 patients was prolonged the total sleep time, was shortened the sleep latency was increased sleep efficiency. Were prolonged REM and nonREM 3 + 4 periods and was shortened wake after sleep onset period. Additional ANOVA confirmed a furthermore improvement in the sub-group of patients with hypnotics withdrawal, $F = 5.94$, $P < 0.023$ for SE. There was also significant improvement of nonREM 3 + 4 sleep and TST in the patients treated with antidepressants, $F = 8.56$, $P < 0.007$ and $F = 11.06$, $P < 0.003$, respectively.

Conclusions: The sleep efficiency significantly increases with hypnotics discontinuation, while total sleep time and amount of nonREM 3 + 4 sleep significantly increases in the group of patients with antidepressant medication.

Young Investigators Posters

Y11

Psychiatric disorders and velo-cardio-facial syndrom (22q11 deletion)

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Velo-cardio-facial syndrome (VCFS), the most frequent known interstitial deletion identified in man, is associated with chromosomal microdeletions in the q11 band of chromosome 22. The VCFS phenotype is complex, with multiple congenital abnormalities affecting several tissues and organs, many of which are derived from neural crest cells. Although phenotypic variability occurs, individuals with VCFS have high rates of psychiatric disorder, especially schizophrenia.

Schizophrenia has a strong genetic component but the mode of inheritance of the disease is complex and in all likelihood involves interaction among multiple genes and also possibly environmental or stochastic factors. A number of studies have shown that the 22q11 deletion syndrome is a true genetic subtype of schizophrenia and as such may play an extremely important role in deciphering the genetic basis of schizophrenia.

We report the case of a 19-year-old patient with a de novo deletion, discovered at 8 months with hypoparathyroidism and revealed by fluorescence in situ hybridization (FISH).

Her psychiatric manifestations are untypical but look like psychotic disorders. With the intention of classifying the symptomatology according to the DSM IV-R, we can't describe her troubles in schizophrenia, schizoaffective disorder or bipolar disorder.

With the help of writings and radiological datas, we try to bring to the fore the relationship between psychiatric disease, genetic basis, environmental context and neurodevelopmental hypothesis.

Finally this syndrom and its pathological consequences are an interesting support in order to apply the vulnerability concept in psychiatric diseases.

Y12

Mood symptoms and disorders in association with dietary intake

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Objective: This study examines the association of the intake of omega-3 fatty acids, intake of amino acids and intake of vitamins with mood disorders. Also we studied food consumption and nutrient intake in subjects with mood symptoms.

Methods: A total of 29,133 men aged 50–69 years participated in a population-based trial in Finland. At baseline men completed a diet history questionnaire from which food and alcohol consumption and nutrient intake were calculated. The questionnaire on background and medical history included three symptoms on mental wellbeing, anxiety, depression and insomnia experienced in the past 4 months. Data on hospital treatments due to a major depressive disorder and mania were derived from the National Hospital Discharge Register, and suicides were identified from death certificates.

Results: We did not find associations between the intake of omega-3 fatty acids, fish consumption and intake of amino acids and depressed mood, major depressive episodes, or suicide. Subjects reporting anxiety or depressed mood had higher intakes of omega-3 fatty acids and omega-6 fatty acids as well as energy. There was no significant association between the dietary intake of vitamins or homocysteine and subsequent admission due to mood disorders.

Conclusions: Dietary intake of omega-3 fatty acids and amino acids showed no association with low mood. Our findings conflict with the previous reports of beneficial effects of omega-3 fatty acids on mood. Further studies are needed to clarify complex associations between the diet and mental wellbeing.

Y13

Comparison of cognitive-behavioral psychotherapy and psychopharmacotherapy in a treatment of agoraphobia with panic disorder and panic disorder

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CBT comes out from verified scientific principals and is very significant treatment.

In our retrospective pilot study ,we aimed at comparison of CBT therapy results of agoraphobia with panic disorder and of the panic disorder alone during the period of 6 months.

Methods: We have included 10 patients with panic disorder and 10 patients with agoraphobia with panic disorder treated by CBT and PPT.

Assessment:

Objective scales:

- Hamilton Anxiety Rating Scale
- Hamilton Rating Scale for Depression 21-item

Subjective scales:

- Beck questionnaire for assessment of the most frequent anxiety symptoms
- Test or the assessment of the incidence of panic attacks

Results: Results proved statistically significant differences. The strengths of our study was 90%.

Conclusion: Combination of CBT and PPT is more effective in panic disorder with faster start of the effect compare to CBT and PPT treatment in patients suffering from agoraphobia with panic disorder.

Y14

Anxiety in children and adolescents with sleep disturbances

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The prevalence of the sleep disorders (SD) estimates as 30% in population. The classification of the disorders based on ICD-10 criteria, includes eight main groups. They appear in children and adolescents as well. The aim of the study was the estimation of the level of anxiety understood as trait and state in children and adolescents with SD.

100 school boys and girls aged 7–18 years of age participated in the study. They underwent two steps examination. First, they fulfilled a questionnaire of the SD. In the second part, 30 patients with diagnosed sleep disorders chosen from the examined group participated in the psychological and neurological examination.

The STAI and STAIC scale, control expression of emotions, TAT. They underwent the intelligence examination as well.

The statistical analysis (analysis of the variance) shows the significant at $P < 0.05$ level correlation between SD and the prevalence of emotional disorders—anxiety as a state, impulsivity. There was no correlation between the duration of the SD and the results of psychological tests. The median IQ was 103.5. There was significant correlation $R = 0.80$ between high level of anxiety and sleep disturbances in a subgroup with intelligence quotient lower than 90.

The conclusion is that the relationship between SD and anxiety is close and may have two-way phenomenon. Emotions and its disturbances can be a reason or a consequence for the SD prevalence. The diagnosis of it is an important data for the planning of the therapy of the patients with SD.

Y15

Epidemiology, risk factors and outcome of suicide attempts a retrospective study of 159 patients

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General background: Suicide prevention is a major Public Health's concern. We wanted to document socio-demographic and clinical data on patients admitted at the Emergency Ward at the Local General Hospital or in the Department of Psychiatry, after an index suicide attempt.

Methods: A questionnaire was completed after the index suicide attempt, documenting: 1) socio-demographic data, 2) informations on means of the suicide attempt, 3) previous medical and psychiatric history, 4) diagnostic status. Follow-up informations of those patients were gathered from June 2005 to September 2005 to document 1) occurrence of repeated suicide attempts or completed suicide, 2) use of medical and psychiatric health facilities, 3) current psychiatric treatment.

Results: 1) 159 patients were recruited from August 2003 to May 2005. Follow-up informations were collected by direct medical consultation for 42 patients up to now and indirect informations through medical files for the others. 2) at index suicide attempt evaluation, 82 patients (53%) had previous suicide attempt. 3) one male patient (60 years old) committed unfortunately completed suicide. 4) information about suicide attempts repetition was obtained for 62 patients. 22 (34,3%) experienced new attempt during the 24 months follow-up study. Among these repeaters, 52% committed suicide attempt during the first month of follow-up. Overall, socio-demographic results confirm literature's data.

Conclusions: Our results emphasize the importance of close follow-up suicidal patients especially in the first months following a suicide attempt. The opportunity for systematic recall procedures and a prospective follow-up study will be discussed.

Y16

Men and anorexia: a clinical case

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Background: Eating Disorders are definitely more prominent among women than men: the percentage of men in Italy corresponds to about 10% of the total number of cases. Currently, studies about this issue are still scarce, but the growing interest about gender considered as an important variable in the expression treatment of psychiatric disorders strongly encourages to explore the different modalities of development and psychopathologic expression of eating disorders among male subjects.

Methods and materials: The present study explores specific features of anorexia among men and the common features with women affected by eating disorders, through the clinical case of a male subject aged 25 affected by anorexia, under treatment in the Centre for Eating Disorders of the Psychiatric Clinic of Ancona Regional Hospital.

After two hospitalizations, in the Intensive Care Unit for 2 months and in the Medical Unit, the patient is currently following a therapeutic treatment that consists of the association of psychopharmacological therapy and of psychodynamic therapy.

Diagnostic evaluation has been carried out also according to tests (EDI-2, BUT, DMI, SESAMO, SCID-2) aiming at evaluating not only the pathology of anorexia but also the possibly associated comorbidity of Personality Disorders, self-defense mechanisms and sexuality features. The patient's family has also been evaluated and psychiatric familiarity for depression has been detected.

Conclusions: The different expressive modalities of psychopathological experiences in men affected by eating disorders when compared to women's, strongly suggest to explore the differences and implications in the treatment of male subjects in a perspective of gender psychiatry.

Y17

Social phobia increases the risk of suicidal behavior in patients with bipolar disorder

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Objective: In an attempt to reduce the phenotypical heterogeneity in an ongoing genetic study of suicidal behavior, we investigated the impact of comorbid anxiety disorders on suicidal behavior in bipolar disorder (BD) patients.

Method: Anxiety disorders were compared in 406 BD I and BD II patients with or without lifetime history of suicide attempt.

Results: Among anxiety disorders, only social phobia (SP) was significantly associated with history of suicide attempts in BD ($P < 0.001$, OR 4.26 [2.284–7.946]). Moreover, onset of SP was found to precede onset of BD.

Conclusions: This result suggests that SP is an important risk factor for suicidal behavior in BD. Further studies are required to determine whether comorbid SP might help to identify a more homogeneous BD subgroup, useful for genetic studies of suicidal behavior, and whether SP might lead to a more severe evolution of BD, for example through the treatment of SP with SSRI. In any case this result suggest that a systematic assessment of SP may help to prevent suicidal behavior in BD.

Y18

Suicide among in-patients with schizophrenia

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Objective: To review the literature on suicide of inpatients with schizophrenia, to identify suicide risk factors as well as typical patterns of behavior and to suggest a rationale and strategies for future interventions

Method: A computerized MedLine, Excerpta Medica and PsycLit search supplemented by an examination of cross-references and reviews.

Results: Up to half the suicides among patients with schizophrenia occur during inpatient admission. Inpatient suicides were found among those of a young age group who were predominantly single, childless and socially isolated. The vast majority experienced an illness characterized by long duration and prolonged psychiatric hospitalizations or multiple admissions and discharges. Up to 50% of the suicides occurred in the first few weeks and months following discharge from the hospital. The paranoid subtype of schizophrenia, where positive symptoms prevail and negative symptoms are few, is associated with a suicide risk that is three times greater than that associated with nonparanoid subtypes and eight times greater than the risk associated with the deficit subtype.

Conclusions: Treatment of suicide is a major problem among inpatients with schizophrenia. Evidence suggests that suicide is generally carried out by patients who have been recently discharged or by those who manage to get away from the hospital. Strategies aimed at preventing this phenomenon have been introduced to the

medical personnel, but suicide in these patients does not seem to have been reduced. We emphasize the need to establish guidelines for the prevention of suicide in hospitalized patients with schizophrenia.

Y19

Suicide risk and sleep disorders in a non-clinical sample of young adults

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Suicide risk has been associated with sleep disorders. This study examined the association between sleep patterns and sleep problems and suicidal behavior among young adults.

Materials and methods: 300 university students (113 males and 177 females), mean age 23.29 (S.D. = 3.01) were assessed with the Reasons for Living Inventory, Self-Rating Depression Scale, Pittsburg Sleep Quality Index, Epworth Sleepiness Scale. Results. We found a significant negative correlation between suicidality scores and sleep quality whereas there was positive correlation between suicidality and daytime somnolence. We found that those subjects who were depressed and who had sleep disorders (both regarding quality and daytime somnolence) had higher suicide risk. Gender differences were also observed.

Conclusions: Suicide risk in a non-clinical sample was correlated with sleep disorders.

Y110

Driving-related fear: study of a clinical sample

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Background and aims: Driving-related fear (DRF) has not often been studied, although it is a frequent disorder. Cognitive-behavioral treatment is useful in this pathology, but needs to be goal-directed to various clinical forms and diagnoses. We wanted to describe a sample of patients suffering from DRF: characterisation of anxiety, depression and phobic components.

Methods: During a 6-months period, all out-patients with DRF were systematically assessed with the following scales: sociodemographic and medical history form, questionnaire assessing anxiogenous situations, description of driving habits, HAD (Hospital Anxiety and Depression) scale, Mark's Fear Questionnaire.

Results: 91.9% of the total group of 37 responding subjects mentioned driving on a motorway as the most anxiogenous situation. Most frequent cognitions are: fear of provoking an accident (62.2%) and excessive fear of speed (56.7%). Concerning behavioural aspects, 89.2% of subjects often or always avoid driving on a motorway and 72.3% of them always do. 81.1% of subjects assess the discomfort due to this phobia on their all-day life as important or maximum. HAD scale underlines that 59% of subjects are likely to have a general anxiety disorder and that 81% of them have a lack of depression. 26.5% of the subjects had been involved in a motor vehicle accident and 45.9% of subjects are suffering from agoraphobia.

Conclusions: The frequent symptoms observed in DRF are fear of speed, fear of losing control and acrophobia. Links with agoraphobia need to be explored. DRF seems to be a polymorphous disorder but often causing significant distress and impairment.

Y111

Influences of polymorphisms of beta-adrenoceptors in the psychopharmacological treatment of schizophrenia

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Introduction: The novel antipsychotics are increasingly associated with metabolic disturbances and with serious weight gain. Recent studies have shown a relation between a SNP in the promoter region of the 5-HT_{2C} receptor gene and weight gain and were thus confirming that genetic factors might have an impact on this side effect.

Methods: We have genotyped 188 schizophrenis patients being treated with atypical antipsychotics for several polymorphisms in the β 1-, β 2- and β 3- receptor genes which are known to be involved in body weight and lipid metabolism. Weight, glucose and serum lipids have been monitored over a period of 5 weeks.

Results: We observed a significant increase in weight (from 74 to 77 kg; $P < 0.001$) and an increase in fasting glucose within the first 3 weeks ($P < 0.001$). The slight increase in both cholesterol and triglycerides was not statistically significant. Furthermore there was a significant relation between the β 2-receptor Arg16Gly polymorphism and weight, as in Arg/Arg homozygotes weight gain was more pronounced during the first 4 weeks (3.0 kg) than in Gly allele carriers (1.4 kg; $P = 0.023$). We further found higher basal cholesterol and triglyceride levels in patients which are homozygote for the Arg allele than in carriers of the Gly allele.

Conclusion: Although still preliminary our data are indicating that metabolic disturbances can be related to variants in genes other than dopaminergic or serotonergic ones. Despite the relatively moderate deterioration in metabolic values within the first weeks, this might be indicative for the risk to develop a metabolic syndrome later on.

Y112

How to make the media an important and trust worthy ally?

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Background and aims: Stigma is as universal as the psychiatric disorders themselves. It's expressed emotions is amplified by media. Therefore education of the vastest possible audience on mental health topics (like biological, psychodynamic, cognitive and psychosocial issues of schizophrenia, bipolar disorders, anxiety disorders, personality disorders) is needed.

Methods: Four years' experience of weekly, structured 2 hours program on national social radio station Radio Net, Sofia, Bulgaria, hosted by the lecturer himself, every Friday 20:00–22:00, providing suggestions for patients with mental disorders and their relatives of coping strategies in everyday life, in different cultural and occupational settings; ongoing antistigma campaign through:

1. Introduction of actual society problems of the day regarded through the prism of mental health repercussions—e.g. Financial troubles with inflation provoquing anxiety as described by lay persons;
2. Short words on the core symptom, e.g. anxiety as a symptom seen in different nosological entities—biological, psychodynamic and cognitive roots.
3. Live phone feedback.
4. Invited guests from the widest range of society-established psychiatrists, GP's, local TV, movie stars, to most ordinary people, patients, relatives.

5. Conclusion: warnings from clinical practice, e.g. threat of anxiolytics abuse, etc.

Results: Sustainable open forum on mental health issues with positive, educational impact on media. Reliable source for support and confidence.

Conclusion: Such a true message could be broadcasted with regard to professional integrity, confidentiality, in respectfully, friendly manner. Listeners freely share experience with the audience.

Y113

Polymorphisms in the corticotropin-releasing factor-binding protein show a gender specific association with major depressive disorder potentially affecting HPA axis function

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Corticotropin-releasing factor-binding protein (CRF-BP) regulates the availability of free CRF and is a functional candidate gene for affective disorders. Previous research showed an association between polymorphisms in CRF-BP gene and recurrent major depression (MDD) in a Swedish sample [1]. The purpose of the current study was to re-evaluate the previous findings in an extended Swedish sample and in an independent Belgian sample of patients with recurrent MDD and in control samples. In total, 317 patients and 696 control subjects were included. Six single nucleotide polymorphisms (SNPs) in CRF-BP gene were genotyped in each subject and the haplotype block structure of the gene was assessed. The association between genetic variants and neuro-endocrine function was examined with the combined dexamethasone/CRF (DEX/CRF) test in a small Belgian subgroup. In the Swedish population, there was a trend towards an association between two SNPs (CRF-BPs2 and CRF-BPs11) and MDD. The subsequent gender analysis showed significant associations of three SNPs (CRF-BPs2, CRF-BPs11 and CRF-BPs12) and haplotype G_T_C_T_C with MDD in Swedish males. G_T_C_T_C is part of the associated haplotype in the original report [1]. These results could not be replicated in the Belgian sample. However, in remitted Belgian MDD patients, CRF-BPs12 C and G_T_C_T_C homozygotes showed a significantly higher cortisol output in the DEX/CRF test. In conclusion, the association between specific genetic CRF-BP variants and major depressive disorder is sexually dimorphic. The related polymorphisms may have an impact on neuro-endocrine function in MDD.

[1] Claes S.J. et al. (2003). *Biol Psychiatry* 54:867–872.

Y114

Mobbing at work: clinical impact and psychosocial outcomes

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Background: Mobbing is an increasing complaint at work. H.Leymann developed the conceptual frames characterized by repetitive and abusive behaviours on a worker. These harassments

realized by insignificant behaviours (separately considered) involve on the victim a moral destructive process.

Aim: Until now, there are very few clinical studies on mobbing.

Methods: Design: Retrospective study

Probands: All outpatients ($N = 395$) of a specialized consultation on stress (Clinique du Sress, CHU-Brugmann, Brussels, Belgium) who met criteria of pathological stress where assessed from 2003 to 2005. For 331 outpatients the main source of stress was imputed to work and within these patients 102 were included as mobbing victims.

Assessment-tools: GHQ-28, Maslach Burn-Out Inventory, Beck-Depression, Perceived stress, Stress at work, Locus of control, Copings, Alexythymia, Assertivity.

Results: ($P = 0,01$): Patients victim of mobbing have a high score of mental suffering at the GHQ-28 ($m = 20.88$, S.D. 4,33; cutting point = 5 maximum 28) and they have a suffering higher than other stressed patients ($m = 16.79$, S.D. 6.61, ANOVA $P = 0.0000$). Job strains are significant for frustrations, hostilities and violence. There are few differences between attitudes of mobbing victims and other stressed patients (Locus of control, copings, alexythymia, assertivity). As outcomes: the work disablement was higher for mobbing ($m = 9.36$ months vs. stressed patients $m = 6,88$) and significant more patients with mobbing were sacked of their job or have decided to resign for it.

Conclusions: Mobbing has particularly severe psychosocial consequences. There are few differences between attitudes of mobbing victims and other stressed patients.