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P 01. Obsessive-compulsive symptoms in schizophrenia

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Introduction: Various studies have shown that between 8-47 percent of schizophrenic patients suffer from OCD.

Aims: The objective of this study is to measure the symptoms of OCD in hospitalized schizophrenic patients.

Method: 96 inpatients with DSM –IV schizophrenia diagnostic criteria were selected from a training hospital. These patients screened for OCD using SCID(Structured Clinical Interview for DSM) and Maudsley Obsessive-Compulsive Inventory. The majority of patients suffered from Paranoid Schizophrenia.

Results: 47 patients were diagnosed obsessive-compulsive on clinical interview and the total MOCI scores of 27 patients were above the given cut off score.

Conclusion: Obsessive-compulsive disorder is a prevalent disorder in schizophrenic patients. The comorbidity of these two clinical entities has both etiological and therapeutic importance. Despite the high specificity of MOCI, the clinical interview is preferred over MOCI because of its higher sensitivity and the number of true- positive diagnosis.

P 02. A population pharmacokinetic meta-analysis of vortioxetine (Lu AA21004) in healthy subjects

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Introduction: Vortioxetine (Lu AA21004) is a novel multimodal compound currently in phase III development as an antidepressant.

Objective: To describe the pharmacokinetics of vortioxetine in the healthy population.

Material/Methods: Data from 26 clinical pharmacology studies were pooled. A total of 21758 vortioxetine quantifiable plasma concentrations collected from 887 subjects with corresponding demography were included in the analysis. The doses of vortioxetine ranged from 2.5-75 mg (single dose) and 2.5-60 mg (multiple QD doses). The covariates tested for relation with the pharmacokinetic parameters were age, weight, height, body mass index (BMI), lean body mass (LBM), albumin, ALAT (SGPT), ASAT (SGOT), bilirubin, creatinine clearance, sex, race, ethnicity (Hispanic or non-Hispanic), region (EU, US or Japan) and inferred metabolic status of CYP2C9, CYP2C19 and CYP2D6. The population pharmacokinetic analysis was performed by means of non-linear mixed effect modelling using FOCE with interaction method as implemented in NON-MEM®, 7 (ICON Development Solutions).

Results/Conclusion: A two-compartment model with first order absorption, lag-time and linear elimination was used with inter-individual error terms on the absorption rate constant (ka), oral clearance (CL/F) and central volume of distribution (V2/F). CYP2D6 inferred metabolic status (i.e. ultra, extensive, intermediate or poor metabolisers) and age on oral clearance and height on central volume of distribution were identified as statistically significant covariate-parameter relationships. For CYP2D6 poor metabolisers, the CL/F was approximately 50% compared to CYP2D6 extensive metabolisers. The impact of height on V2/F and age on CL/F was low and not considered of clinical relevance. The population mean values for oral clearance and central volume of distribution were 32.7 L/h and $1.97 \cdot 10^3$ L, respectively. The estimated elimination half-life on average was 65.8 hours. The final model was found to be reliable, stable and predictive.

P 03. Intervention for a sleep health program on the basis of cognitive behavioral therapy through e-mail newsletters for Japanese students

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Background/Aims: Several reports suggest that college students have atypical sleep patterns and poor sleep quality. As such, it is very important to develop an effective intervention method to help improve the quality of sleep among these students. On the basis of cognitive behavioral therapy (CBT), we examined the effect of an intervention program to improve sleep quality and the overall mental health among these students.

Methods: Sixty students participated in the intervention group and 61 students participated in the control group. Both groups received the lecture on

sleep hygiene. Only participants in the intervention group received the once-weekly e-mail newsletters on sleep health (stimulus control and sleep restriction) and were ordered to maintain a sleep diary for 4 weeks. The Pittsburgh Sleep Quality Index (PSQI) and Kessler 6 were measured before the lecture (as the baseline measurement) and 5weeks later (as the post measurement) in both the groups. Effect size was calculated by the mean difference divided by the pooled standard deviation, the root mean square error estimated from the general linear model.

Results: In the intervention group, the PSQI scores were not reduced by an estimated mean difference of -0.53 points (95% CI -1.40 to 0.33) compared with the control group (P = 0.22, effect size = -0.22, 95% CI -0.57 to -0.13). However the K6 scores in the group were reduced by an estimated mean difference of -2.12 (95% CI -3.69 to -0.56) points compared with the control group (P = 0.00, effect size = -0.47 95% CI -0.82 to -0.12).

Conclusions: A sleep health program based on CBT, utilizing e-mail newsletters, may improve mental health and may be a cost effective way for Japanese students to receive treatment for poor sleep. An important question remains on whether the program will substantially improve or maintain mental health.

P 04. The effects of antidepressant monotherapy versus adjunctive therapy with an atypical antipsychotic in new-onset major depressive disorder

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Background: Many drugs have been used to treat depression, but the efficacy of such drugs is limited. Although there exists variation between drugs, only one third of the patients achieve remission with the first antidepressant trial. Many studies have been done to increase remission rates. Studies on antidepressant combination therapy have not yielded consistent results, and recently, antipsychotic augmentation therapy has received a lot of attention. For this reason, we investigated differences in treatment response between an atypical antipsychotic (aripiprazole) augmentation group and an antidepressant monotherapy group in patients with new-onset major depressive disorder.

Method: We recruited 42 patients with new-onset major depressive disorder. Twenty-one patients were prescribed escitalopram only, and 21 patients received adjunctive therapy with aripiprazole at the beginning of the treatment by flexible dose. We performed the

17-item Hamilton rating scale for depression (HDRS-17) in both groups at the beginning of the study period, as well as during the 2nd, 4th, 6th, and 8th weeks of therapy.

Results: The dropout rate in the augmentation group was lower than that of the monotherapy group (19.0% vs. 42.9%). The mean final dose of escitalopram in the antidepressant monotherapy group was 11.67mg, and the mean final dose of escitalopram and aripiprazole in atypical antipsychotic augmentation group was 11.88mg and 2.66mg, respectively. The decrease in HDRS-17 scores of the atypical antipsychotic augmentation group compared with the antidepressant monotherapy group was statistically significant in visit 4(8th week of therapy). When we analyzed the statistical data with Repeated Measure ANOVA, significant symptom reduction was shown in the aripiprazole augmentation group ($F = 22.256$, $p<.001$)

Conclusions: The present study suggests that initial augmentation therapy with atypical antipsychotics may be superior to antidepressant monotherapy in new-onset major depressive disorder. Although we have to consider the adverse effects of atypical antipsychotics, augmentation therapy may be another option available to improve treatment outcomes in new-onset major depressive disorder.

P 05. Prefrontal cordance in the outcome prediction of 1-Hz, right-sided, prefrontal rTMS in patients with depression

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Background: Previous studies demonstrated predictive effect of reduction of prefrontal QEEG cordance in theta frequency band for depressive patients treated by various antidepressants. The aim of the study was to examine whether the reduction of theta prefrontal QEEG cordance value after one week of 1-Hz, right-sided, prefrontal rTMS administration is associated with response to 4-week treatment in depressive patients.

Methods: We have analyzed data of resistant patients treated in the double-blind study compared efficacy of 1 Hz rTMS (20 sessions, 100% MT, 600 pulses per session) with venlafaxine ER who completed the study (n = 25). We have calculated an average theta cordance values obtained from 3 frontal electrodes from EEGs performed at baseline and week 1. Depressive symptoms were assessed using MADRS.

Results: All nine responders ($\geq 50\%$ reduction of MADRS score) and 6 out of 16 non-responders

decreased prefrontal cordance value after the first week of rTMS (p = 0.003). PPV and NPV of cordance change for response to treatment were 0.6 (95% CI, 0.42−0.6) and 1 (95% CI, 0.73−1), respectively. ROC analyses of the cordance change after week 1 as a predictor of response yielded AUC of 0.75 (95% CI, 0.54−0,90).

Conclusion: Based on our results, the prefrontal QEEG cordance might be helpful in the prediction of the response to the 1-Hz, right-sided prefrontal rTMS in depressive patients as it was previously described for antidepressants. This study was supported by PRVOUK P34.

P 06. Anxiety of first cadaver demonstration in medical, dentistry and pharmacy faculty students

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Background: Anatomy is the fundamental of medical and health professional education. Anatomic dissection enables the examination of the organs in the human cadavers systematically and topographically. The aim of this study was to determine the effect of the first cadaver demonstration and the anxiety of medical, dental and pharmacy students.

Methods: A questionnaire was distributed to 486 students in 2009−2010 academic year at Ege University. The review of anxiety reveals the circumstances such as exhaustion, stress, depression, anxiety, destructive life, deterioration of mental or physical quality or asthenia (over – fatigue), professionally having a serious effect on the students. 486 students in total participated in this research carried out as based on voluntariness.

Results: A medium level of anxiety was detected in the students in their first encounter with the cadaver. The State Anxiety Score (SAS) average taken by all the students who took part in the research is 42.6 ± 5.60 and Trait Anxiety Score (TAS) average is 46.6 ± 5.0. No discrepancy was detected among the faculties with respect to anxiety score. While the SASs of the male students were higher than the girls, the TASs of the girl students were detected to be higher than male students. While the characteristics and the cultural life of our society force the male students into stronger behavioral patterns, they may actually increase their anxiety level in distressed con-

ditions. The fact that trait anxiety is high in both sexes, particularly in female students can be explained by the patient responsibility and the work load undertaken in the professions in the medical field as early as the period of education.

Conclusion: Before the students' applied lessons with the cadavers start, a preparatory session must be planned for this education in order to decrease the anxiety level by sharing their sensations, feelings and perceptions related to the demonstration.

P 07. Newly-Graduated Physicians' Perceived Stress Before Specialization Exam

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Background: Medical students suffer from stress and mental distress more than other universıty students. Different stressors operate at different stages of medical education. Newly graduated physicians face a number of stressors about their future careers like inadequate preparation for specialization examination or being unsuccessful in this exam, not being able to work in their professional lives, inadvertently hurting patients and unemployment at the end of their training. Academic factors particularly increased academic workload and fear of failure are some of the sources of stress. Test anxiety is a significant problem for them. The aim of this study is to determine views of newly graduated physicians on the causes of anxiety.

Methods: Newly graduated young physicians were randomly invited to participate in this study. Semi-structured interviews were conducted with 16 of them 15 days before the specialization examination. The themes covered perceived sources of stress, the effects of stress on physicians.

Results: Almost all physicians preferred medical faculty by own desire. 75% were satisfied with their career decision. 70% did not have any negative effect in their life in this period. Perceived important causes of stress during this period were economical, social, uncertainty of workplace conditions and exam anxiety. According to all physicians this exam was stressful. While 75% reported that stress decreased their learning performance, some of them said that moderate stress increased their study motivation. Physicians thought themselves in direct competition with their friends in this exam. They often felt depressive

and sometimes hypomanic. They explained their emotion with these words: milk glass, indefiniteness, weariness, surprise.

Conclusions: Physicians who experienced severe and extreme pressure due to examination have big stress. Stressors may include time pressure, financial debt, the need to learn a large amount of information in a relatively short time. Physicological and peer support must be considered to help them cope with this situation in this period.

P 08. Attitudes of general practitioners towards training in mental health

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Background: literature indicates that General Practitioners (GPs) identify 50% of their psychiatric patients. On the other hand, despite being referred to Mental Health resources, only a small percentage of these patients require specialized attention. Deficiencies in training in this area and problems such as excessive demands and scarce time available for the visit are among the reasons for both problems.

Objective: to design a program of psychological training in the psychotherapeutic care of patients with mood disorder addressed to GPs, to assess their attitudes towards the training and their relationship with professional and personal variables.

Methods: Location: Five primary care units (PCU) linked to a Community-Based Mental Health Center which covers an area of 100.000 inhabitants. Participants: GPs (n = 31). Main measures: a self-rated and anonymous questionnaire consisting of 8 items related to their attitudes with a scaled response of 5 alternatives was developed. Descriptive study: Distribution of frequencies (answer type, PCU, sex, age, training via Medical Intern Resident, contract type, professional experience, and previous training in mental health); proportions were compared using the Chi-Square test.

Results: Item 8 and PCU (value 22.741; p = 0.05), Item 6 and training via Medical Intern Resident (value 7.630; p = 0.01) and Item 6 and age (value 6.404; p = 0.05).

Conclusion: In general, a positive attitude is observed towards training in the psychotherapeutic management of patients diagnosed with mood disorder by GPs. Difficulties in the implementation of such psychotherapeutic tools and difficulties in the

diagnosis are recognized, relying on the lack of time per visit.

P 09. Low Adiponectin and High Resistin Levels in Panic Disorder

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Background: Some previous studies have reported high metabolic and cardiovascular abnormalities in patients with panic disorder (PD) [1]. Resistin is an adipokine that was shown to impair glucose tolerance and insulin action [2]. In contrast to resistin, adinopectin has insulin-sensitizing and anti-atherogenic effects [2]. We aimed to investigate the serum adiponectin and resistin levels of PD patients.

Methods: The serum adiponectin and resistin level were determined in 31 PD patients and weight, age and sex-matched 29 healthy controls. Panic-Agoraphobia Scale (PAS) was applied to all groups. ELISA method was used for measurement of adiponectin and resistin levels.

Results: The patients' mean resistin level (15.70 ± 9.93) was significantly higher than that of control subjects (7.02 ± 8.51), $(p < 0.001)$. The mean adiponectin levels of patients $(26.91 \pm 16.77$ ng/ml) was significantly lower than control group $(47.69 \pm 23.56$ ng/ml), $(p < 0.001)$. In the patient group there was a negative correlation between adiponectine levels and PAS scores $(r = -0.441, p = 0.019)$.

Conclusions: There may be a relationship between PD and changes in plasma adiponectin and resistin levels. This relationship may suggest a role to resistin and adiponectin in the underlying mechanisms that makes PD patients vulnerable to cardiovascular and metabolic abnormalities. Further studies are needed.

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P 10. Partial Inactivation of Pon1 Activity and Increased Lipid Hydroperoxide Levels that point out Oxidative Stress in Generalized Anxiety Disorder

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Background: In recent years, there has been an increasing focus on generalized anxiety disorder (GAD) which is one of the most prevalent mental disorders in general population. Psychological, genetic, neurobiological and neurochemical factors are believed to play a role in the ethiopathogenesis of GAD. The role of oxidative stress, as a neurochemical cause, in various anxiety disorders has been studied in recent years; however, it has not been thoroughly studied in GAD, yet. In this paper, we aimed to evaluate the serum levels of lipid hydroperoxide (LOOH), paraoxonase, and arylesterase in GAD patients without any co-morbid psychiatric disorders and investigate their diagnostic performance.

Methods: The study was conducted according to the revised version of the Helsinki Declaration and approved by the local ethics committee. All subjects were informed about the study protocol and they provided their written consent. Blood samples were collected from 40 GAD patients and 40 healthy control subjects to measure their serum LOOH levels, arylesterase and paraoxonase activities. Obtained results were compared between groups and ROC curve was drawn for diagnostic performance of measured biochemical markers. For suitable parameters, positive predictive value and negative predictive value for the taken cut-off were estimated.

Results: The patients' mean LOOH level was significantly higher than that of control subjects ($t = -5.49$, $p < 0.001$), whereas, mean paraoxonase activity was significantly lower in patients ($t = 3.056$, $p = 0.03$, $t = -0.894$, $p = 0.374$, respectively). GAD could be predicted for LOOH over 7.740 µmol/l level with 92.5% positive predictive value and 92% negative predictive value.

Conclusions: Increased LOOH level and decreased paraoxonase activity of GAD patients may suggest increased lipid peroxidation and oxidative stress in these patients. LOOH levels may be a state marker for diagnosing GAD.

P 11. Affective Manifestations of Stiff-Person Syndrome: A Case Report with Clinical Considerations

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Purpose: Stiff-Person Syndrome (SPS) is a rare central nervous system disease characterized by progressive muscle stiffness with painful axial muscle spasms and the absence of neurological signs. The presentation of SPS can be complicated by the presence of psychiatric manifestations such as depression, anxiety and alcohol abuse. Here we present a case of SPS in which the patient's psychiatric symptoms prolonged the diagnosis. We then discuss this case and make suggestions for the management of psychiatric symptoms that present in association with SPS.

Methodology: A retrospective medical chart review was conducted along with a literature review of SPS and its correlation with psychiatric manifestations.

Results: SPS is associated with an antibody to glutamic acid decarboxylase (GAD), an enzyme needed to produce gamma-aminobutyric acid (GABA) from glutamic acid. Recent studies have suggested that mood, thought and anxiety disorders are all disorders that represent a dysfunction in the GABA system leading to low levels of GABA in the central nervous system. It has been theorized that anti-GAD antibodies may lead to a general deficiency in GABA that predisposes SPS patients to develop psychiatric disorders. Treatment for the psychiatric manifestations of SPS should target the GABAergic system resulting in both improved neurologic and psychiatric function. This can be achieved through pharmacologic and psychological interventions.

Conclusion: The interplay between psychiatric and neurologic symptoms has been the object of speculation in SPS since its first description. Affective symptoms should be considered with the diagnosis of SPS given that the imbalance between GABA and glutamate results not only in neurologic symptoms but also in psychiatric distress as well. By providing both pharmacologic and psychological treatment for the affective symptoms of this disabling disorder through an attempt to restore the balance between GABA and glutamate, psychiatric services can be helpful in managing the physiologic and pychogenic stressors which contribute to the exacerbation of the clinical symptoms of SPS.

P 12. The role of gender in the relationship of personality and parenting styles with mood and anxiety symptoms

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Background: Different studies show that personality characteristics are relevant psychological variables in the development of internalising symptomatology (i.e. depression, phobia, or generalised anxiety). Furthermore, negative parenting styles (e.g., rejection) may be important environmental factors in the development of various psychological disorders. Thus, the aim of the present research was to study the relationship among personality, parental rearing behaviours, and their interactions in predicting the internalisation syndrome in males and females.

Method: Seven hundred and forty-two participants (63.3% females, mean age = 23.28, SD = 3.71) completed the NEO-PI-R personality inventory and the EMBU-SF perceived parental rearing style questionnaire. Moreover, participants answered different self-reports on internalising symptomatology (BDI, PSWQ, ACQ, and FQ).

Analyses: Regression analyses were carried out examining if personality, rearing styles, and their interaction predicted internalisation symptomatology in both groups of gender.

Results/Discussion: Results showed that neuroticism, conscientiousness and mother's rejection rearing predicted the internalisation syndrome in both males and females. Moreover, higher father's overprotection rearing predicted higher internalizations symptoms in women. No significant interactions between personality and parenting styles were found as predictor of the internalising syndrome. The present study indicated that personality variables are related to internalizing symptoms in males and females similarly. However, the gender of parents and the gender of participants are relevant variables to clarify the relationship between perceived parenting styles and the own internalising symptoms.

P 13. Relating individual differences in trait-anxiety to children's memory for emotional information: An investigation using illustrated emotional stories

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Background: There is extensive evidence indicating cognitive biases at several stages of information processing in high-anxious children. However, there are very few studies investigating a potential memory bias towards negative information in this age population, despite a growing body of research confirming it in adults. Also, in the recall of complex visual scenes, there has been some indication in studies with adults that individuals with higher levels of trait anxiety display an emotion-induced *memory "trade-off"*, consisting in better recalled negative visual central information, at the cost of a poorer recall of the neutral peripheral elements. However, there is no indication whether this effect is replicated in high-anxious children.

Aims/Methods: The major aim of the present study was to investigate the relationship between individual differences in children's trait anxiety and memory recall for verbal and visual information, in a task consisting in three emotional (positive, negative and neutral) narrated stories adapted after Bishop et al. (2004), accompanied by complex emotional visual scenes. A total of 99 school age children (aged between 8.9 and 11.8 years old; mean age = 125.8 months, $SD = 7.64$) were evaluated regarding trait anxiety levels and performances for Illustrated Emotional Story recall, Complex scene recall, Central and peripheral element recognition.

Results: Compared to children with lower levels of trait-anxiety, high-anxious children displayed: (1) no emotion induced memory bias for the emotional stories recall performance; (2) the predicted emotion-induced memory "trade-off" in visual scene recall; and (3) a poorer overall element recognition performance, irrespective of stimulus valence, or role of stimulus in the scene (central or peripheral).

Conclusions: Hence, the results confirm the limited previous literature on anxiety's deleterious effects on children's memory functioning. However, most importantly, finding an emotion-induced memory recall trade-off in children with nonclinical anxiety reveals that such biases are not found at clinical levels of anxiety only, supporting the possibility of a continuum of anxiety symptoms - anxiety disorders.

P 14. The Cardiovascular Safety of Escitalopram at High Dosage

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Aim: To investigate the QTc interval in patients with major depressive disorder (MDD) who had not responded to adequate treatment with citalopram

and were switched to escitalopram in doses up to 50mg [1].

Methods: This was an open-label, pilot study conducted in 60 primary care patients with MDD who had not responded to adequate treatment with citalopram. Patients were treated with escitalopram up to 50mg for up to 32 weeks until they achieved remission (MADRS ≤ 8) or failed to tolerate the dose. The QTc interval of the patients was analysed using a repeated measures general linear model.

Results: The citalopram dose at baseline ranged from 20 to 60mg, with no significant association between citalopram dose and QTc interval (p = 0.608). At baseline, the mean (SD) QTc interval was 405ms (SD = 21); no patients had a QTc interval >470ms and 4 patients had a QTc interval >450ms. The median escitalopram dose was 40mg at week 8 and 50mg at week 32. One patient had a QTc interval >470ms (484ms, week 6) and 1 patient had an increase from baseline >50ms (55ms, week 8). At week 32, the mean QTc interval for the 42 patients that completed escitalopram treatment with a valid post-baseline ECG measurement increased by 8ms (95% CI 0.8, 15) to 412ms (SD = 19.4): the mean change from baseline in QTc was -2.5ms (SD = 18) for escitalopram doses of 20 and 30mg/day (n = 9) and 10ms (SD = 25) for escitalopram doses >30mg/day (n = 33).

Conclusions: Treatment of patients with MDD with escitalopram at up to 50mg/day for 32 weeks showed a small but statistically significant increase in the QTc interval.

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P 15. Comorbid Panic Disorder and Suicide Attempts in Major Depressive Disorder

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Background: Comorbid panic disorder is associated with more severe symptoms and poorer therapeutic response in individuals with primary major depressive disorder. However, the relationship between comorbid panic disorder and risk of suicide attempts in patients with major depressive disorder has not been confirmed.

Aims: This study was aimed to examine the relationship between comorbid panic disorder and clinical characteristics associated with suicidal risk as well as the likelihood of suicide attempt.

Methods: A total of 223 outpatients (80 males, 143 females) with current major depressive disorder participated in the study. Both subjects with panic disorder (33%) and without panic disorder (67%) were compared on the history of suicide attempts, current psychopathologies and traits of impulsivity and anger.

Results: Subjects with panic disorder had higher level of impulsivity, depression and hopelessness and were more likely to report a history of suicide attempts. Suicide ideators with panic disorder had higher suicide ideation scores than suicide ideators without panic disorder. Subjects with panic disorder were younger at the time of first major depressive episode and first suicide attempt than those without panic disorder. They also experienced more number of episodes than those without panic disorder. Logistic regression analyses indicated comorbid panic disorder to be significantly associated with a history of suicide attempts, and this association persisted after adjusting for demographics, comorbid alcohol use disorder, psychiatric history and impulsivity.

Conclusions: These findings suggest that comorbid panic disorder in patients with major depressive disorder may be associated with more severe burden of illness and independently increase the likelihood of suicide attempts.

P 16. A retrospective case series of bipolar patients during pregnancy: lithium prophylaxis, risk of recurrences and maternal/neonatal complications

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Background: Lithium is among the first-line maintenance treatments for bipolar disorder (BD), but its risk-benefit ratio during pregnancy is still at issue. We studied retrospectively the effect of continuation or discontinuation of lithium during pregnancy on the course of BD and on neonatal/maternal safety.

Methods: Among approximately 1,800 patients treated at our Lithium Clinic, we found 13 BD patients who became pregnant after starting lithium treatment. We used the Retrospective NIMH-Life Chart Method and the Morbidity Index (MI) to compare the longitudinal course of BD during pregnancy and postpartum depending on treatment status (on/off lithium). In addition we collected data about neonatal/maternal complications.

Results: Of the 13 women included in the study 1 did not bring any pregnancy to term while the other 12 were assigned to a treatment group according to their first completed pregnancy. During pregnancy, 1 off-lithium patient had an illness episode, compared to none of the on-lithium group (mean MI 0.03 vs 0). Of the 5 off-lithium patients 4 had episode recurrences during postpartum period, compared to 2 out of 7 on-lithium patients (mean MI 0.36 vs 0.07). We observed 4 terminations of pregnancies after lithium interruption and 3 miscarriages under lithium treatment. Considering all the completed pregnancies (7 with lithium interruption and 8 with lithium continuation), 1 case of clubfoot was found after lithium discontinuation, whereas, after lithium intrauterine exposure, we observed: 1 case of hypotonic baby, 1 case of asymptomatic ventriculomegalia detected at the 8th month of pregnancy and bilateral hip dislocation at birth, 1 case of neonatal arrhythmia and 1 suspected case of cardiac malformation, not confirmed after birth. In regard to maternal complications, we found 2 cases of gestational diabetes and 1 case of acquired hemophilia occurred after the delivery among patients who continued lithium treatment.

Conclusions: Although limited by the small sample size and retrospective nature, our study suggests that lithium treatment decreases the recurrence risk during pregnancy and postpartum and that is relatively well tolerated. The entire spectrum of risks and benefits involved in the clinical management of pregnant BD women should be considered.

Method: Analysis of coexistence of perception categories of the patient's current relationship and the present anxiety symptoms was done with the use of logistic regression, on the basis of the KO "0" Symptom Checklist and Life Inventory, completed prior to treatment in a day hospital for neurotic disorders.

Results: In questionnaire interviews, obtained from a group of 2582 females and 1347 males treated in the years 1980−2002, statistically significant relationships were found; for instance, the occurring relationship breakdown was associated with the risk of social anxiety in males (OR = 3.76), quarrels accompanied by calling the police with the risk of panic attacks in both sexes (females: OR = 1.48; males: OR = 2.68), in males but not in females- conflict resolution in relation by silence with the risk of social anxiety (OR = 2.00), panic attacks (OR = 1.50) and hypochondriacal anxiety (OR = 1.48). The risk of panic attacks was associated with the men's sense of inferiority to a partner (OR = 1.81), but also with marriage contracted of habit (OR = 1.91). Women hating their partners more often suffered from agoraphobic anxiety (OR = 2.19) and hypochondriacal anxiety (OR = 2.36).

Conclusions: The perception of the patients' current partner relationship or marriage is associated with more frequent occurrence of some symptoms of anxiety disorders. The obtained results indicate the importance of the current burdensome life circumstances for shaping the patients' functioning and psychopathological picture of their disorder.

Conflict of Interest

P 17. Perception of partner relationship and anxiety symptoms

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Aim: Analysis of relation between subjectively perceived characteristics of the current partner (or marital) relationship and the coexistence of selected symptoms of anxiety disorders.

P 18. Personality traits changing with improvement of various anxiety symptoms

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Aim: Specifying the dynamic relationship between traits of personality profile described by the neurotic personality questionnaire KON−2006 with the results of psychotherapy, achieved in the scope of anxiety disorders symptoms.

Methods: Medical records of 246 patients treated with psychotherapy in the day hospital, with diagnoses of neurotic disorders, confirmed by the results of the KO "0" Symptom Checklist and the personality questionnaire KON−2006. Correlation analysis was carried out to explore the areas in which the changes in personality inventory scales occur simultaneously with the improvement of particular anxiety symptoms included in the questionnaire or groups of such symptoms (scales).

Results: Changes of values in the scale Phobia (in the symptom checklist) were significantly associated with changes of values in the following scales of the personality inventory: Asthenia ($r = 0.61$), Sense of guilt ($r = 0.58$), Belief of being helpless in life ($r = 0.57$), Negative self-esteem ($r = 0.53$) and Demobilization ($r = 0.52$). Changes of values in the scale of Other anxiety disorders were significantly associated with changes in scales: Negative self-esteem ($r = 0.50$), Sense of guilt ($r = 0.50$), Sense of threat ($r = 0.47$), Exaltation ($r = 0.46$), Sense of dependence on the environment ($r = 0.46$) and Sense of alienation ($r = 0.46$). Some important connections were also found in single symptoms, for instance, change in the severity of symptom anxiety while being alone, (e.g. in an empty apartment), with a change in the scale of Impulsiveness.

Conclusions: The interrelations, indicated in the results of psychotherapy studies, between the changes of anxiety disorders symptoms and the changes in personality traits allow to assume that the grounds of neurotic disorders lie in the later ones. Further studies may enable to build a model of the pathogenesis of neurotic disorders.

Conflict of Interest

There is no conflict of interest, the study was not sponsored, it was financed with the statutory funds for research purposes of Jagiellonian University in Krakow (K/ZDS/000422, 501/NKL/270/L, K/DSC/000018). It was carried out with the consent of the Jagiellonian University Bioethics Committee.

P 19. Changes in the profile of diagnoses of patients treated with psychotherapy in a day hospital over the past 25 years. Increase in the anxiety disorders' rate?

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Aim: To determine trends of applying for psychotherapy treatment in a day hospital of patients with various psychiatric disorders over the past 25 years.

Method: For the six subgroups of patients qualified to a day hospital in the years 1985, 1990, 1995, 2000, 2005, 2010, totally over 2 500 medical records were retrospectively analyzed and the main diagnoses were reformulated to stick to the ICD−10 classification.

Results: In the following years a gradual increase in the percentages (13%, 14%, 16%, 25%, 36%, 39%) of anxiety disorders (ICD−10 codes F40.x and F41.x) was observed in both women and men. Other changes include a gradual decrease in the percentages of diagnoses of somatoform disorders and conversion / dissociative disorders, as well as neurasthenia. Fluctuations in the percentages of personality disorders were also notified.

Conclusions: Apparently, over the past 25 years the proportions of the proposed diagnoses (probably also disorders) of patients of the large academic psychotherapy center, originally oriented to treat neurotic disorders have changed. Modifications in recommendations, tradition and diagnostic classification can explain only some of these changes, some are likely to be due to cultural processes or the increase in the availability of more profiled treatment (eating disorders and some personality disorders), and taking into consideration the others (for instance anxiety disorders vs. somatization disorder) no satisfactory, even hypothetical, explanations were found.

Conflict of Interest

There is no conflict of interest, the study was not sponsored, it was financed with the statutory funds for research purposes of Jagiellonian University in Krakow (K/ZDS/000422, 501/NKL/270/L , K/DSC/000018). It was carried out with the consent of the Jagiellonian University Bioethics Committee.

P 20. Error monitoring in major depressive disorder with psychomotor retardation: an fMRI study

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Background: Previous studies demonstrated disturbed error monitoring in major depressive disorder (MDD). Approximately 50 to 150 msec after the commission of an error, a sharp negative event-related potential is elicited, known as Error-related Negativity (ERN). Findings are mixed with some studies reporting enhanced ERN in MDD and

others reporting attenuated ERN, suggesting that specific depressive features may be linked to disturbed error monitoring. Correlations between disturbed error monitoring and psychomotor retardation, one of the core features in MDD, have been found. The anterior cingulated cortex (ACC), insula and basal ganglia are associated with both error monitoring and psychomotor retardation, justifying the assumption that they are involved in an integrated system important for the execution and evaluation of actions. To confirm the postulated assumption and to further disentangle the complex relationship between psychomotor retardation and disturbed error monitoring in MDD, an fMRI study was conducted.

Methods: Fourteen MDD patients underwent clinical and psychomotor assessments. During fMRI recording the patients performed a speeded flanker task.

Results: The behavioral data reflected an overall substantially prolonged performance. As in similar studies, incorrect responses were faster than correct responses and congruent responses were faster than incongruent responses. Psychomotor retardation correlates significantly with more activation in the parietal lobus and the insula after an erroneous answer than after a correct answer.

Conclusions: There is an important overlap between the neural substrates responsible for psychomotor retardation and error monitoring in MDD, with a possible role for the insula and the parietal lobus. Previous studies consistently demonstrated correlations of insular activity with ratings of core symptoms in MDD. The current study pointed more exactly to the core symptom of PMR to be partly related to insular activity.

P 21. Duplication of GTF2I results in separation anxiety in mice and humans

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Background: Duplication or deletion of human chromosome 7q11.23 causes neurodevelopmental disorders with contrasting social anxiety phenotypes. People with 7q11.23 duplication syndrome (Dup7q11.23) have social anxiety while those with 7q11.23 deletion (Williams-Beuren syndrome, WBS) do not. We sought to determine the role of one of the 26 commonly duplicated/deleted genes, GTF2I, in early life anxiety.

Methods: We examined the dose-dependent effects on anxiety in 8-day old pups with either reduced or increased Gtf2i genomic copy number, using maternal-separation induced ultrasonic vocalization. We measured separation anxiety in children with Dup7q11.23 or WBS using the Anxiety Disorders Interview Schedule for DSM-IV: Parent Version (ADIS-P) and Item 37 on the Child Behavior Checklist (CBCL) Ages 11/2−5.

Results: Mouse pups with three or four genomic copies of Gtf2i produced significantly more vocalizations after separation than did pups with one or two copies of Gtf2i, indicating increased separation-induced anxiety. 26.3% of 4−12-year-olds with Dup7q11.23 met the criteria for a DSM-IV diagnosis of separation anxiety disorder, whereas only 4.2% of those with WBS met these criteria (p < .001). 28.6% of 2−5-year-olds with Dup7q11.23 but only 1.1% of those with WBS was reported to often become too upset when separated from their parents.

Conclusions: This study links the copy number of a single gene from 7q11.23 to separation anxiety in both mice and humans, and highlights the utility of mouse models in dissecting specific gene functions for genomic disorders that span many genes. The linking of GTF2I to separation anxiety in mice and humans provides evidence for a single gene in the etiology of the Dup7q11.23 phenotype, and offers insight into molecular pathways for separation anxiety that may enable the development of targeted therapeutics.

P 22. Reward sensitivity and aggression in bipolar disorder

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Background/Aims: One model of bipolar disorder (BPD), supported by structural and functional neuroimaging studies, proposes that BPD involves a

hypersensitive behavioral activation system (BAS) [1]. According to this model, persons with bipolar disorder, even when euthymic, should display traits such as increased aggression and increased reward sensitivity as compared to healthy controls. This study examined these predictions through the use of computerized behavioral assessment tasks.

Method: Subjects were euthymic adult bipolar disorder patients (BP; N = 40) and healthy controls (HC; N = 41). Aggression was assessed using the Ultimatum Game (UG), as previous studies have shown the rejection of marginally unfair offers to be correlated with higher levels of both anger and testosterone [2]. Reward sensitivity was assessed using the probabilistic classification task (PCT). Intelligence was estimated by the Raven Standard Matrices test.

Results: In UG, all participants showed the standard pattern of rejecting overtly unfair offers and accepting clearly fair offers; however, BPs rejected more of the moderately unfair offers than did HCs (p < 0.02). In PCT, a significant interaction between intelligence and diagnosis (BD vs. HC) in reward learning was found (p < 0.02): BPs with lower intelligence learned the reward task more rapidly than BPs with higher intelligence, whereas intelligence was positively associated with reward learning in healthy controls.

Conclusions: This study provides partial support for the hypersensitive behavioral activation system model of bipolar disorder.

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P 23. Adult Attention Deficit and Hyperactivity Disorder Comorbidity in Obsessive Compulsive Disorder

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Background: Attention deficit hyperactivity disorder (ADHD) and OCD are neurodevelopmental disorders. Studies suggest that similar parts of brain are affected in OCD and ADHD. There are studies demonstrating o frequent coexistence of OCD starting in early adolescence with ADHD, and reported rate of comorbidity of these disorders is around 10−50%. n a study evaluating the genetic similarities of ADHD and OCD, an increased OCD and ADHD comorbidity was discovered in first degree relatives of patients with OCD and ADHD coexistence. However there are no studies evaluating adult ADHD comorbidity in patients with OCD. We aim to analyze the presence of adult ADHD comorbidity with OCD and to compare OCD patients with and without adult ADHD and healthy controls.

Method: This study is a prospective cross sectional study performed at Sisli Etfal Teaching and Research hospital between January 2011 and June 2011. Sixty patients with OCD, and sixty healthy controls were included in the study. Structural Clinical İnterview for DSM-IV (Turkish version), Wender Utah Rating Scale, Turgay's Adult ADD/ADHD DSM-IV based Diagnostic and Rating Scale and Yale Brown Obsessive Compulsive Scale (Y-BOCS) were administered to participants. In order to confirm the full diagnosis of adult ADHD DSM-IV criteria were used.

Result: A significantly high rate of adult ADHD was identified in OCD group, compared to control group (20% vs. 1,7%, p = 0.002). OCD was found to be present in 66.7% of OCD patients with ADHD before the age of 18, while the same percentage was 18.8% for OCD patients without ADHD (p = 0.002). Checking compulsion was found highest in OCD patients with adult ADHD(50%).

Conclusion: An increased ADHD comorbidity was identified in patients with OCD compared to control group. The presence of ADHD might be important for treatment and prognosis in patients with OCD, especially with checking compulsion and starting early in life.

P 24. Depression and anxiety disorder comorbidity in patients with obstructive sleep apnea syndrome (OSAS)

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Background/Aims: Obstructive sleep apnea syndrome (OSAS) is a common sleep disorder with an estimated

prevalence of 5% among adults, defined by frequent episodes of obstructed breathing during sleep. The prevalence of OSAS is higher in men than in women. Depressive episodes have been reported in 34% of OSAS patient samples and some studies found high anxiety in these depressed OSOS patients. In our study; we aimed to look into the variety of the psychiatric diseases in patients with OSAS.

Methods: 27 patients who applied to Sisli Etfal Teaching and Research Hospital between 2010−2011, diagnosed as obstructive sleep apnea syndrome included in the study. The cases who visited Odiology clinic in 2010 and revived diagnosis of OSAS were inspected video-EEG-polysomnography, included in the study. All the cases were assessed by a psychiatric expert according to the criteria of DSM IV using the M.I.N.I. (Mini International Neuropsychiatric Interview).

Results: There were more male patients in the OSAS group (n = 15, 56% vs n = 12, 44%). Major depression (MD) was found in seven patients (25.9%). There was more depression comorbidity in females than in males (n = 6, 50% vs n = 1, 6.7%, p = 0.015). Panic disorder (PD) (n = 6; 22.2%), specific phobia (SP) (n = 6; 22.2%), agoraphobia (AP) (n = 4; 14.8%), obsessive compulsive disorder (OCD) (n = 2; 7.4%), generalized anxiety disorder (GAD) (n = 2; 7.4%) and social anxiety disorder (SAD) were (n = 2; 7.4%) found. Anxiety disorder comorbidity was not different significantly (n = 8, 66.7% vs n = 6, 40.0%, p = 0.123). All the depressed patients (n = 7) were comorbid with an anxiety disorder, except one female patient.

Conclusions: Major depression is not a rare comorbidity in OSAS. Unless the prevalence of OSAS is higher in men than women, depression comorbidity is higher in females then males in patients of OSAS. Clinicians should be aware about depressive disorders in patients with OSAS, especially in female patients.

All authors declare that they have no conflicts of interest.

P 25. Biological variables in patients suffering from affective disorders- Metabolic data
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Background/Aims: Patients affected by severe mental disorders in categories of mood disorders receive assistance in our Mental Health Center often during lifetime. We try by this study to evaluate main biological factors we deal with in our daily work.

Methods: This is an observational study on patients affected by severe mental disorder- mood disorders observed in the year 2011.

Results: A sample of 29 patients entered the study, 12 men and 17 women. Age had a mean value of 49,586.

Main diagnoses on Axis I DSM IV were Bipolar I disorder on 14 patients, Bipolar II disorder on 6, Major depression on 6 and Depressive disorder-Unspecified on 3 patients. 7 patients had a second diagnosis on axis I.

On axis II 15 patients with personality disorder. On Axis V GAF score had a mean value of 64,48.

Number of patients free from any organic disorder was 11 on the whole sample.

On variable number of drugs significant gender differences were found on the number of psychotropic drugs prescribed: men were taking less drugs than women as tested by t-test.(t value = −2,05) P = 0,05.

Body Mass Index BMI on our sample had a mean value of 29,679.

Pearson Correlation between numeric variables was significant and positive between values of age and Body Mass Index. P = 0.053.

No differences were found in organic factors between diagnostic groups excepting glucose level which was higher on unspecified depression group.

Conclusions: From the study of our sample on people affected by affective disorders we can infer a population of moderately ill mental patients with a high degree of mental and physical comorbidity.

Obesity is an important risk factor for our patients, on polipharmacy the most of them during lifetime.

Relationship between BMI and age gives us a motivation for accurate care of those patients in order to avoid accumulation of organic disease in long term treatments.

P 26. New Clinical Guidelines in Ireland – Are we listening? A study of Citalopram and Escitalopram prescribing in a large general hospital
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Aim: To ascertain whether prescribing of Citalopram and Escitalopram is in accordance with new Irish clinical guidelines.

Background: Citalopram and Escitalopram are among the most commonly prescribed antidepressants in Ireland. There have been several post-marketing reports of QTc prolongation and arrythymias in association with these agents, and a large study in 2009 showed an exposure-QTc relationship with both agents. Following review of this study, in 2011, the Irish Medicines Board circulated new prescribing guidelines, outlining lower maximum daily doses; lower recommended doses in those > 65 years or with hepatic impairment; and contraindication with other agents which prolong QTc, including all antipsychotics. The response to this new evidence has not been the same worldwide. The general hospital population reflects a wide variety of prescribers, providing an ideal opportunity to study prescribing practice.

Method: A list of agents associated with QT prolongation was established. Drug kardexes of all in-patients in all wards of the hospital were examined at one fixed point, for age; gender; drugs; and doses prescribed. Patients\' contemporaneous liver function tests were examined and those with impaired synthetic function were identified according to the Child-Pugh criteria.

Results: Of 780 patients, 28 were prescribed Citalopram and 26 Escitalopram. Prescribers' guidelines were followed in 52% of cases. Two patients on Citalopram and four on Escitalopram were prescribed inappropriately high doses, all were > 65 years and four also had abnormal LFT's. In 12 cases, Citalopram and in 10 cases, Escitalopram, were prescribed with another QTc-prolonging agent, most commonly Haloperidol, Quetiapine, and Domperidone. Over half of all patients had abnormal LFT's, and co-prescription occurred in one-third of these.

Conclusions: Prescribing Citalopram and Escitalopram is not currently within new guidelines with respect to dose; age; impaired hepatic function; and co-prescription. This may reflect a lack of vigilance or lack of awareness regarding the potential risks of QT prolongation among prescribers. It also highlights the challenge of changing clinical practice in response to new evidence, and the need for further debate about the role of clinical guidelines and their best use.

P 27. FDA approved Psychotropic Medications List for Psychiatric Illnesses commonly seen in current US Population and Comparison with Europe

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Objectives: To Describe the process for FDA and EMEA approval of drugs used to treat psychiatric disorders, identify disorders of DSM-IV TR commonly seen in US Military Medicine, present currently FDA approved Psychotropic Medications Listing for Psychiatric Illnesses in Current US Military Medicine.

The participant will be able to identify psychiatric disorders of DSM-IV TR commonly seen in current US Military Medicine and have access to a FDA approved Psychotropic Medications Listing for Common Psychiatric Illnesses in Current US Military Medicine.

Research Question: What are the current FDA and EMEA approved Psychotropic Medications for Common Psychiatric Illnesses in Current US Pacific Military Medicine.

SCIENTIFIC:

Mission/Project: The U.S. Food and Drug Administration (FDA) and its European Counterpart, the EMEA are recognized for enforcing two of the world's most rigorous drug review processes, determining what medications are safe and effective, which makes their approval a meaningful title to many patients. Having a readily accessible list of DSM-IV TR Psychiatric disorders/diseases with the corresponding FDA and EMEA approved psychotropic medications clearly listed would help communication between providers and patients and prevent bad outcomes. Currently, no such document is readily available.

Methods/Design: Review of most commonly seen psychiatric disorders in the US Pacific Military Medicine setting. Review of the current FDA Orange book for current FDA approved Psychotropic Medications for Common Psychiatric Illnesses in Current US Pacific Military Medicine.

Results: Outcomes of Project.

An accessible list of DSM-IV TR Psychiatric disorders/diseases commonly seen in the Military Medicine setting with the corresponding FDA approved psychotropic medications clearly listed.

Discussion/Implications for Medical Practice

Our goal is to create a user friendly document listing common DSM-IV TR Psychiatric disorders seen in the US military setting with the corresponding FDA approved psychotropic medications to aid healthcare providers, and educate patients about the significance of using a medication for its FDA approved diagnoses versus "off-label" prescribing, and to compare this process to the EMEA process.

P 28. The Development and Psychometric Assessment of a Scale to Measure the Severity of Examination Anxiety among undergraduate University students

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Background: Test anxiety is a special form of anxiety, which is characterized by somatic, cognitive and behavioral symptoms of anxiety in situations of preparing and performing tests and exams. Test anxiety turns into a problem when it becomes so high that it interferes with test preparation and performance.

Objectives: To develop and psychometrically assess an instrument to measure examination anxiety among Egyptian undergraduate university students.

Method: Based on empirical evidence and recent literature review we developed a 12 item scale to measure the severity of examination anxiety. The instrument was administered to students, during the two weeks prior they wrote their examinations. Experts (n = 10) participated in a validation process of the instrument before it was administered to consenting psychology students (n = 100).

Results: Internal consistency reliability for the instrument was 0.82 (Cronbach's alpha) and there was 92% overall agreement between experts about the relevance of the instruments' items to measure students' examination anxiety, providing evidence for content validity. Factor analysis resulted in three cohesive and theoretically meaningful factors; Factor 1: Excessive performance anxiety, Factor 2: Negative academic self concept and excessive autonomic response, and Factor 3: Familiar test anxiety. The three factors accounted for 59% of the variance in responses related to students' perceptions and experiences about examination anxiety. There was evidence for convergent validity, and the factors' scores correlated positively with the Sheehans' patient –rated anxiety scale, providing further evidence for criterion-related validity.

Conclusion: There is evidence for content and convergent validity. The developed instrument is a reliable, valid and empirical measure to assess the severity of examination anxiety. The scale will take five minutes to complete. The scale will be utilized to detect high risk students who may benefit from counselling or treatment of anxiety

P 29. Differences between depressed escitalopram-treated patients visiting primary and secondary healthcare professionals

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Aim: The aim of this study was to investigate the differences in baseline characteristics and evaluation practices concerning effectiveness and safety issues of depressed adult patients treated with escitalopram in Greece, managed either by primary (GPs, general practitioners and internists) or secondary (SPCs, psychiatrists and neurologists), healthcare professionals.

Methods: This open-label, 3-month observational study was conducted in 121 private offices and hospital outpatient clinics involving both GPs and SPCs. Sex, age, severity of depression, severity of anxiety and family history were recorded at baseline. Depression severity was assessed by the CGI-S and anxiety severity by the GAD-7 scale. Effectiveness was assessed at two post-baseline visits and remission was defined as CGI-S ≤ 2. Safety was evaluated by adverse event reporting and discontinuation rates. Statistical analysis was performed using all patients with at least one post-baseline measurement.

Results: 2037 patients were enrolled in the study (mean age of 54 ± 15 years, 62.9% women, 35.2% with comorbid anxiety, mean baseline CGI-S of 4.3 ± 0.8 and GAD-7 score of 10.2 ± 4.6). SPCs recruited more patients (n = 19) than GPs (n = 15). A significantly higher percentage of patients managed by SPCs had a family history of depression and were younger ($p < 0.001$, in both cases). Baseline CGI-S and GAD-7 scores were significantly higher in patients managed by SPCs ($p < 0.001$, $p = 0.002$, respectively). Mean CGI-S and GAD-7 scores improved at post- baseline visits ($p < 0.001$, for both scales) independent of the healthcare provider and remission rates were 50.5% and 47.5% for SPCs and GPs, respectively. Although discontinuation rates were similar in both healthcare physicians' segments, the percentage of spontaneous adverse event reporting was more than double in patients managed by SPCs (9.4%) compared to patients managed by GPs (4.4%).

Conclusion: Patient family history and age, baseline disease severity and adverse event reporting were significantly different in depressed patients treated with escitalopram and managed by primary *versus* secondary healthcare professionals.

P 30. Potential benefits of slow titration of paroxetine treatment in elderly population

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Background/Aims: Approximately 15% among over 65-years individuals suffers from depression. Particularly in this population, SSRIs could lead to an early exacerbation of anxiety and a very gradual titration is usual in clinical practice. The aim of this study is to compare efficacy and tolerability of gradual versus rapid titration of paroxetine in the elderly.

Methods: 50 non-demented elderly (≥ 60 years old) outpatients with Major Depression or Anxiety disorders (≥ 13 total score at Hamilton Depression Rating Scale - HAM-D - or Hamilton Anxiety Rating Scale -HAM-A) were naturalistically treated with abrupt initial of 10 mg paroxetine or with a slow titration (2.5 mg on alternate days up to 10 mg in 7 days). Then dosage could be adjusted according to clinical response.

Results: During the first 3 days of treatment a significant worsening in psychic anxiety was observed in patients treated abruptly with 10 mg of paroxetine (difference in HAM-D psychic anxiety subscale from baseline: 110.61% vs. 89.38% with rapid and slow titration respectively; $p = 0.03$). Overall a significantly greater improvement in depressive and anxious symptoms favored gradual titration (HAM-D Core cluster and HAM-D psychic anxiety cluster respectively repeated measure ANOVA $p = 0.014$ and $p < 0.001$, also when controlling for confounders). At 8th week slightly higher drop outs in patients administered with abrupt dosage was observed (15.38% vs. 39.13%, $p = 0.06$; respectively for slow and rapid titration).

Conclusion: Our results suggest that a gradual titration of paroxetine could avoid the initial treatment anxiety worsening and drop out at the beginning of the treatment. Open issues are possible concomitant somatic treatments and difference in long-term tolerance.

P 31. The Effects of D-Cycloserine on Fear Extinction and Expression of zeta-1 subunit of NMDA Receptors in Rats Traumatized with Predator Scent

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Background: The role of cognitive enhancers and learning processes in the anxiety disorders are being investigated extensively. D-cycloserine (DCS), a partial agonist of the glycine-binding site of the NMDA receptors, mostly affects NR1 subtypes with a NR2-dependent manner. We hypothesized that DCS may be effective in traumatic stress. This study was planned to show the effects of multiple DCS injections on fear extinction in a traumatic stress model.

Methods: Thirty adult Wistar rats of both sexes were used in the study. Upon a 7 day habituation period in reversed cycle, traumatic stress was induced by using a block with cat fur odour. Rats were recruited into experimental groups: a trauma free control group, traumatic stress induced control group, traumatic stress induced groups receiving a 3 day extinction training or receiving daily DCS injections with 3 or 5 day extinction trainings. Saline injections were also given to test the effects of DCS in traumatized control groups. The behavioral data were recorded by a video camera. The rats were sacrificed and the amygdaloid complex, ventral hippocampus and the frontal cortex were dissected according to Paxinos-Watson Rat Brain Atlas and Western blotting experiments were performed for zeta-1 subunit of NMDA receptor proteins.

Results: Three-day extinction training prior to DCS injection protocol significantly decreased the duration of avoidance and the risk assessment behavior, while the contact with the block duration increased. In the ventral hippocampus expression was found to be decreased in response to trauma. The zeta-1 subunit proteins were found to be

increased in the amygdaloid complex during extinction training. Extinction also suppressed the increases in zeta-1 subunit expressions produced by traumatic stress in the frontal cortex and DCS restored the suppression of zeta-1 subunit of NMDA receptors.

Conclusions: DCS may be beneficial in decreasing the avoidance and the attributed risk to the threatening cue while facilitating the reconsideration of the perceived risk. The role for NMDA zeta-1 receptors may be further assessed.

P 32. Depression of bipolarity often diagnosed as Major Depressive Disorder

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Background: Bipolar disorder is complex and can be difficult to diagnose. Hypomania is considered normal and not diagnosed, so bipolar disorder II (BD II) often misdiagnosed as recurrent major depressive disorder. Therefore BD II is often mistreated.

Aims: This study aims to examine major depression according to a new view of the bipolar spectrum and to answer the question: what part of major depression is in fact bipolar depression? Early identification of symptoms of hypomania (specific for BD II) using strict and dimensional criteria. As such, an instrument for self-assessment of hypomania symptoms might increase the detection of suspected and of manifest, but under-treated, cases of bipolar disorders.

Method: 380 patients (over 19 years old) with major depressive disorder (first episode or recurrent depression) were interviewed. Hypomania Checklist −32 (HCL-32, to 190 patients) was used to identify symptoms of hypomania while Mood Disorder Questioner (MDQ, to 190 patients) was used to find subthreshold manic symptoms or symptoms of bipolar spectrum. Patients underwent a detailed psychiatric assessment using categorical criteria of DSM-IV for bipolar disorder and dimensional criteria (tolerant criteria) of Zurich study (2005).

Demographic data were analyzed. Hypomania was detected and was calculated according to epidemiological statistical program EpiINFO.

Results: Study showed that 19% of patients meet criteria for hypomania according to DSM-IV criteria (bipolar disorder that treated as major depressive disorder). Referred dimensional criteria 24−39% are in fact bipolar disorders. MDQ showed that 23% of MDD patients have symptoms of bipolar spectrum.

There is statistically significant between hypomania that finding and the number of depressive episodes, duration, beginning of depression before age 25.

Conclusion: a major part of MDD is in fact depression of bipolarity and should be treated as such.

P 33. Bipolar disorder often hiding behind alcohol abuse

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Background: Most people who abuse drugs and exult in alcohol have mental disorders. The difference between psychiatric symptoms that stem from substance abuses and those promote that, is often difficult to be done. Many patients abusing with substances and drugs in order to "treat" emotional disorders that exist before as depression, anxiety and psychosis. Up to 40% of people who consume alcohol frequently exhibit symptoms of depression. To 5−15% of people who have problems with depression appear alcohol problems. Alcohol hides depressive symptoms but encourages hippomanic symptoms. Thus Bipolar II disorder is diagnosed.

Method: In our study 380 patients were interviewed who were diagnosed with major depression disorder presented in QKSHM n 1 and n 2 and in Psychiatric Hospital in Tirana during 12 months (February 2011−2012) with age over 19 years. Was used as a measuring instrument HCL-32 to detect hippomanic symptoms and structure psychiatric interview.

Results: In this study we found that 23% of the patients with depressive disorder have hippomanic symptoms and 36 (19%) border cases.

47% of them hide this diagnosis with alcohol abuse. 29% of them use hypnotics. Alcohol use negatively affects the social life to 12% of the patients and negatively effects on family life to 13% of them.

Conclusion: Alcohol covers a considerable amount bipolar disorder.

P 35. Positive psychological resources among Japanese university students with deep depression and anxiety: A study of flow experience and strength-awareness

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Objectives: The field of positive psychology has in recent years indicated that people who use their strengths more are happier, more confident (Govindji & Linley, 2007), more resilient (CAPP, 2010), and

experience less stress (Wood, et al., 2010). Within Cognitive Behavioural Therapy, in addition, the identification of clients' innate strength is recommended when offering support to clients, or cultivating their resilience (Padesky, 2012). The present study examines whether the possession of positive psychological resources such as strength and flow experience act as preventive factors against depression and anxiety, in order to investigate how likely they are to support university students with deep depression and anxiety.

Method: We asked 217 Japanese university students (100 males, 117 females, average age 18.48 ± 1.14 years) to complete an original Strength Awareness Scale survey of sixty items, Zung's Self-report Depression Scale (Zung, 1965), and the Japanese edition of the State-Trait Anxiety Inventory (Shimizu & Imae, 1981). We further asked the students to complete a flow experience checklist (Ishimura & Kodama, 2009) to identify any experiences of apathy, anxiety, relaxation, or flow in their experience of five different everyday activities in which they were engaged.

Results: Results of correlation analysis indicated that strength-awareness and frequency of flow experience have a weak negative correlation with depression ($r = -.329, p<.01, r = -.210, p<.01$) and anxiety ($r = -.239, p<.01, r = -.195, p<.01$). Also, dividing existing SDS responses in four groups and STAI responses into five groups, the results of a variance analysis in which strength-awareness and frequency of flow experience were dependent variables indicated the scarcity of positive psychological resources in cases of severe depression and anxiety, and that it was possible for even one activity conducive to flow experience to prevent depression and anxiety.

Conclusion: In psychotherapeutic settings, it may contribute to the relief of depression and anxiety to encourage university students with those traits to be aware of strength and to engage in even one everyday activity that promotes flow experience.

P 36. Adult Attachment Style at Discharge Predicts Depression 4 Months Following a 28-day Alternative Milieu Inpatient Program

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Background: As many as 25% of patients discharged from hospital are either re-hospitalized or visit an emergency department within 30 days. It is a high priority for clinicians to have a better understanding of what predicts relapse and treatment resistance in order to avoid continuous patterns of relapse and heavy use of limited hospital resources. Numerous studies have reported the link between attachment styles with a negative model of the self (i.e. preoccupied and fearful) which attachment styles are associated with increased rates of depression in both the general and clinical population, however, no study to our knowledge has been made to determine whether adult attachment styles can predict clinical response sustained remission or relapse from a Major Depressive Episode (MDE). This study examined whether adult attachment styles at discharge from a 28-day alternative milieu inpatient program (AIM) were predictive of depression status at 1-month and 4-month follow up, after controlling for depression status at discharge.

Methods: At the time of discharge from the AIM program, study participants ($N = 40$) were given self-report questionnaires to assess depressive symptoms and attachment styles (the QIDS and Relationship Style Questionnaire (RSQ) respectively). Depressive status was then re-assessed at 1-month and 4-month follow up based on repeated QIDS. A score of 15 or more on the QIDS was considered depressed. We then completed 2 logistic regressions, 1 to predict depression status (yes/no) at 1-month and the 2nd to predict depression at 4 month follow-up. In each case, Step 1 of the logistic regression controlled for depression status at discharge (yes/no), age and gender. In Step 2 we entered scores for the four main attachment styles generated by the RSQ (secure, fearful, dismissing, preoccupied).

Results: As expected, depressive status at discharge was a strong predictor of depressive status at 1 and 4 months post-discharge. After controlling for depressive status at discharge dismissive attachment assessed at discharge was a significant predictor of depression status at 4-month follow up ($p = 0.038$). Patients with higher levels of dismissive attachment had less chance of being depressed at 4 months follow-up than did other patients. Fearful attachment predicted a greater chance of depression at 4-month follow-up at a trend level of significance.

Conclusion: High levels of dismissive-attachment at the time of discharge from the AIM unit may protect patients from depression at 4-month follow up, while fearful attachment might contribute to depression risk. Pending replication in larger samples, assessing attachment styles at the time of discharge from the AIM unit may have clinical utility in discharge planning.

P 37. Does light have psychophysiological non-image-forming (NIF) -effects outside of retinohypothalamic tract (RHT)?

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Background: According to the prevailing theory NIF-effects of light are mediated by retinal melanopsin (OPN4) via RHT [1]. The ability of light to suppress pineal melatonin secretion is thought to contribute to psychophysiological NIF-effects. However, day-time light treatment produces NIF-effects even though melatonin level is virtually undetectable. Furthermore, even though 40 to 80 lux can suppress melatonin secretion [2], antidepressant effect is observed at higher intensity levels. In addition, wavelengths beyond the melanopsin sensitivity range can also cause NIF-effects [3]. Our recent advances in studies show that melanopsin is present in several sites of the human brain [4]. Moreover, transcranial bright light (TBL) modulates the neural networks of the human brain [5], alleviates symptoms of SAD [6] and improves cognitive performance in healthy subjects [7]. Therefore, we investigated whether TBL is able to suppress melatonin secretion.

Methods: Eight subjects (age: 27 ± 5y) with normal circadian rhythm participated in this placebo-controlled crossover trial. Subjects were exposed to 24 minutes TBL or sham exposure via ear canals at 1.10am. The condition order was randomized. The saliva samples for melatonin measurements (radioimmunoassay) were collected hourly between 9pm−3am and 6am−9am, at noon and 6pm.

Results: There were no significant differences in mean saliva ($p = 0.435$) concentrations between sessions in any sampling points. The secretion of melatonin during TBL and sham sessions paralleled natural secretion profile of human.

Conclusion: Transcranially administered bright light does not seem to suppress melatonin secretion. Regarding our and other's earlier reports the idea of light-induced psychophysiological effects outside of RHT seems plausible. Further studies on the effects and mechanisms of light outside of RHT are called for.

Conflict of Interest

HJ employee, JN shareholder and TT minor shareholder in Valkee Ltd. No other conflict of interest.

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P 38. Gender-specific effects of prenatal exposure to dichlorodiphenyltrichloroethane (DDT) on depressive-like behavior and aryl hydrocarbon receptor signaling in mice

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Dichlorodiphenyltrichloroethane (DDT) has been banned from agricultural use, but it is still being used in certain countries to fight the spread of malaria. This pesticide exerts a long residual persistence, thus DDT intoxication is still the subject of ongoing studies. Chronic exposure to pesticides is known to cause alterations on monoaminergic neurotransmission, which may result in neurodegenerative disorders. Recent studies indicated that adult humans chronically exposed to DDT had overall poorer performance and impaired verbal attention and eye-hand coordination. Although DDT is capable of crossing placental and brain barriers, little is known about its effects at early stages of neural development. An involvement of aryl hydrocarbon receptor (AhR) pathway in DDT action on the developing brain also needs to be clarified. This study aimed to investigate the effects of prenatal exposure to *p,p'*-DDT and *o,p'*-DDT on depressive-like behavior and AhR signaling in juvenile mice. Swiss mice were treated with DDT isomers from 16th to 20th day of pregnancy.

One-month old offsprings were subjected to forced-swimming and tail-suspension tests. Total RNA was isolated from hippocampal tissue, and the reverse transcription was followed by qPCR to asses AhR nuclear translocator (ARNT) mRNA. Our study indicated that exposure to *p,p'*-DDT increased immobility of juvenile female mice in the forced-swimming test, but exposure to *o,p'*-DDT decreased immobility of the animals subjected to tail-suspension test. Such behavioral alterations were not observed in males. Prenatal exposure to *p,p'*-DDT and *o,p'*-DDT diminished the level of ARNT mRNA in male hippocampal tissue, without affecting the level of ARNT mRNA in female tissue. These data suggest that *p,p'*-DDT-induced depression-like behavior is the gender-specific, but ARNT-independent effect, thus pointing to the complex mechanism of DDT action on the developing nervous system.

Acknowledgements

P 39. The Relationship of Hopelessness, Anxiety and Depression in a Sample of Freshmen in Meram Medical Faculty

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Background: Hope, which lay at the bottom of the Pandora 's Box, is the feeling that what is wanted can be had or something desired may happen. Hopelessness is the opposite of hope and means being not able to learn or act, perform, or work as desired. It is a set of negative expectancies of the future that do not change when corrective information becomes available. Hopelessness is a central component of Beck's cognitive theory of depression. Hope is an important emotion while becoming a physician but there is a limited data about it. The aim of this study was to determine the level of hopelessness, anxiety and depression levels of freshmen and to examine them in respect to gender, medical career decision and satisfaction with this choice.

Methods: Hopelessness, anxiety and depression levels of randomly selected every one of the third of freshmen were measured with Beck Hopelessness, Anxiety and Depression Scales with an anonymous questionnaire, voluntarily. Student's t-test, analysis of variance and correlation tests were used to examine relationships among the variables.

Results: The mean age of the 78 freshmen representing 38.23% of the class was 20.17 ± 1.01 (18−24) years. Cronbach's alphas were 0.92, 0.90 and 0.89 for Hopelessness, Anxiety and Depression Scales, respectively. Generally, they selected medical career by their own decisions (n = 55; 76.4%). The 65.4 percent had mild to severe depression levels correlated with hopelessness and anxiety (p < 0.05). Hopelessness, Anxiety and Depression scores and standard error of means were 5.34 (0.63), 16.71(1.34) and 13.50 (1.10), respectively. There were no differences between scales in respect to gender, career selection and satisfaction (p > 0.05) but hopelessness, anxiety and depression were in a significant positive correlation in the study group.

Conclusion: The results confirm the relationship of hopelessness, anxiety and depression. The high level of depression of freshmen correlated with hopelessness is emerging. Hope still lies at the bottom that we should teach them how to get it.

P 40. Medical Students' Loneliness, Anxiety and Depression at the Beginning

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Background: Medical schools were pointed as the first fact for medical students' stress in addition to personal and professional factors. Loneliness, anxiety and depression are generally negative undesirable socio-emotional states that interfere with daily functioning which have been found to be associated with higher school dropout rates, poor academic performance, and dissatisfaction of life. Studies showing the emotional states of medical students at the beginning are very limited. The aim of this cross sectional and descriptive study was to describe loneliness, anxiety and depression levels of medical students at the beginning of medical career, and analyze the differences in respect to gender and correlation of anxiety with loneliness and depression.

Methods: An anonymous questionnaire consisting of socio demographic questions, University of California Los Angeles Loneliness Scale (UCLA), Hospital Anxiety and Depression Scale (HADS) was applied to freshmen's of Meram Medical Faculty, voluntarily. Student t-test, One-way Anova, chi-square, Kruskal–Wallis tests

and correlation analyses were made. P values less than .05 were considered significant.

Results: The 93.7% (n = 211) of the first year students were analyzed. Cronbach's alpha was 0.89 for UCLA and 0.80 for HADS Scale. The mean age was 19.07 ± 1.22 years. Above the half were male (n = 121, 57.9%), 68.8% (n = 139) were from urban. While 37.7% (n = 75) were satisfied with the city, 58.4% (n = 122) were satisfied with the career decision. The UCLA, Anxiety and Depression scores of the students were 35.00 ± 9.86, 8.14 ± 3.69 and 5.98 ± 3.34, respectively. 25.4% (n = 53) were anxious, and 30.1% (n = 63) were depressive according to cut-off levels. Males were more depressive (p = 0.00). Economic difficulties and partly satisfaction with the career decision make them more lonely, anxious and depressive (p < 0.05). Loneliness, anxiety and depression were in a significant positive correlation.

Conclusion: The information about medical students' stress at the beginning may give medical education a chance to teach strategies for promoting students well-being with a more student-friendly curriculum, circumstances and to chance the perception of it being a disaster.

P 41. Are negative emotions bad? Evaluating emotions and mental health of Japanese children

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People are likely to regard the experience of negative emotions as unpleasant and aversive. Relationship between negative evaluation of negative emotions (NENE) and mental health of Japanese children was investigated. Students in fourth grade of elementary to third grade of junior high school (*N* = 1,056: 537 boys and 519 girls: aged 9 to 15 years) participated in the study. They completed a questionnaire assessing NENE, including anger, sadness, and anxiety, as well as depressive tendencies. Results indicated no significant gender differences, nor significant differences between school years in NENE scores. However, children with high NENE scores had significantly higher depressive tendencies. These results suggest children that negatively regarded negative emotions may have poor mental health consequences. It is suggested that those with high NENE scores are unable to appropriately process negative emotions. The need for conducting further research on NENE and developing effective interventions to mitigate NENE is suggested.

P 42. Predicting factors for utilization of community mental health center following suicide attempt

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Objective: This study examined predicting factors for utilization of community mental health service following suicide attempt.

Methods: The subjects were 601 suicide attempters whom we visited in an emergency center at university hospital. We divided them into Utilization Group (UG) and Non-Utilization Group (NUG), based on attending the aftercare services for suicide attempters in community mental health center. We surveyed socio-demographic characteristics, clinical characteristics, suicide lethality with the risk rescue rating scale (RRR), suicide intent with the Suicidal Intent Scale (SIS) and factors related to treatment.

Results: Among all participants, 421 subjects (69.8%) used aftercare services for suicide attempters in community mental health center. AG showed lower rate of living with alone, higher rate of history of psychiatric treatment (current, past), family history of suicide, admission after suicide attempt(either medical or psychiatric ward) compared to NAG. Logistic regression analyses revealed that living together, high-lethality, intention for suicide and admission after present suicide attempt are predicting factors for utilization of community mental health center.

Conclusion: These findings suggest that more individualized approaches are needed to provide community mental health service for suicide attempters who have risk factors such as living alone, refusal to admission.

P 43. Psycho-educational intervention on self-compassion attitude and its effects on depressive symptoms

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Background: Recent studies have reported that cultivating an attitude of self-compassion, such as

exercising kindness and sympathy reduces shame, anxiety, depression and self-criticism (Gilbert & Procter, 2006). Furthermore, it is discussed that compassion-focused therapy can stimulate soothing affect regulation including lowering heart rate and cortisol level, and that the results of individual differences relate to attachment style (Rockliff, et al., 2008).

Method: This study utilizes a psycho-educational intervention to teach participants cultivating compassionate mind, and examines the effects on depressive symptoms, such as rumination and hopelessness. More specifically, 24 Japanese college students participate in the study as an intervention group, and they receive booklets which provide educational materials, including ways to reflect feelings and thoughts, and be self-affirming. Examples of situations to affirm and self-affirming words are included as supplemental materials. The intervention group is asked daily to identify and record 5 things about themselves to affirm for four weeks. As a control group, 56 Japanese college students participate in the study. Before and after the intervention, the participants complete measures of self-compassion (Self-Compassion Scale; Neff, 2003), response style Response Style Scale; Shimazu, Koshikawa, & Kondo, 2006), depression (Self-rating Depression Scale; Zung, 1965), and hope (Kato & Shyder, 2005). Dependent variables include the sub-scales of applied measurements including problem-solving thoughts and recreational distraction.

Result: Dependent variables include the sub-scales of applied measurements, and Analysis of Variance (ANOVA) was performed. The result shows that the intervention group scores higher on self-compassion and lowers on the depression scale after the intervention. This group also demonstrates more problem-solving thoughts and hope and less rumination.

Conclusion: The authors discuss the effectiveness and implications of the psycho-educational intervention on self-compassion for improving psychological well-being. Furthermore, the authors consider the possible applications of the psycho-educational intervention for clinical population and treating depression.

P 44. Psychodynamic therapy of reduced mentalization in depression

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Background: Reduced capacities of mentalization (ability to make and use mental representations of one's own and other people's emotional states, Fonagy et al., 2002) seem to be a core feature of various mental disorders (Subic-Wrana et al. 2010). Recent studies report restricted capacities of depressed patients to mentalize (Staun et al., 2010, Wolkenstein et al. 2011). Little is known about mental processes during the course of treatment and whether improvement of mentalisation can be achieved by inpatient psychodynamic therapy.

Methods: We studied forty consecutive, non-selected inpatients with at least moderate depression (ICD-10: F32/33.1/2; BDI > 18). Multimodal psychotherapy was administered with a variety of single and group psychodynamic therapies (verbal and creative psychotherapies). We used test batteries (SCL-90-R, BDI-II, FSozU, AAS, RME, MASC-test), at two times (beginning of treatment and after six weeks). As a control group, we studied a matched, randomly selected sample of thirty healthy adults.

Results: The depressed patients were, compared to the control group, impaired in their capacity to mentalize, at the beginning of treatment, in the MASC-test, but not in the RME. The degree of depression correlated inversely with the capacity to mentalize. After six weeks, we found a significant improvement of mentalization in the depressed group.

Conclusions: Depressed patients may not be impaired in their decoding function of affective mimic states (RME) but in their ability to infer cognitions, intentions and affective states from social contexts, information and actions. The ability to connect affective and cognitive states is an important prerequisite for the development of intentionality (Fonagy et al., 2004). The group of depressed patients with impaired capacity to mentalize improved significantly by inpatient multimodal psychodynamic psychotherapy.

P 45. Impact of mood and anxiety symptoms on quality of life in patient with CRPS

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Objectives: Little data are available about the clinical characteristics of CRPS. The purpose of this cross-sectional study was to assess the clinical manifestation, psychiatric co-morbidities and quality of life of Complex Regional Pain Syndrome (CRPS) in Korea.

Methods: Forty-four patients diagnosed with CRPS type-I and II base on the International Association for the Study of Pain criteria were enrolled in this study. The pain symptoms were evaluated with use of 10-cm visual analog scales (VAS) and the short-form McGill Pain Questionnaire (SF-MPQ). Psychiatric characteristics were assessed using Structured Clinical Interview for the DSM IV-Axis I and II, Hamilton rating scale for depression (HAM-D), Hamilton rating scale for anxiety (HAM-A), Becks depression inventory (BDI), Becks anxiety inventory (BAI), Pittsburgh Sleep Quality Index(PSQI), World health Organization Quality of life-BREF Scale (WHOQOL - BREF).

Results: Thirty eight patients (86.4%) were diagnosed with CRPS type 1 and six patients (13.6%) with CRPS type II. Patients had been prescribed 4.9 different kinds of medications and the most frequently used medication was anticonvulsant (86.4%). Sixty eight percent of the subjects (N = 30) met the criteria for major depressive disorders (N = 20, 45.5%) and depressive disorder NOS (N = 10, 22.7%). The mean HAMD and BDI score was 16.98 ($\pm$ 9.92), 27.71 ($\pm$ 13.20) respectively. And HAMA score was 17.16 ($\pm$ 12.25), BAI score was 27.34 ($\pm$ 15.59) on average. A significant correlation was found between MPQ total score and HAMD (r = 0.438, p < 0.012), BDI (r = 0.540, p < 0.001), HAMA (r = 0.461, p < 0.008), BDI (r = 0.684, p < 0.000), PSQI (r = 0.547, p < 0.001). In contrast, a negative correlation was found between MPQ total score and physical domain of QOL (r = 0.500, p < 0.004).

Conclusion: This study showed that depressive symptom is the most common in these patients and is associated with lower quality of life and poor sleep quality. Multidimensional approach about pain and other co-morbid symptoms should be considered.

P 47. Predictors of quit smoking among adolescent students in a public smoking cessation clinic in South Korea

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Introduction: The aim of this study was to understand the factors correlated to cigarette smoking among adolescents by analyzing data obtained from a smoking cessation clinic and to develop strategies to prevent cigarette smoking.

Methods: We analyzed 98 subjects, whose ages ranged from 13 to 19 years old. They started a smoking cessation program during July 16, 2007 to December 31, 2008 in a community health center in Ulsan, South Korea. The t-test and the chi-square test were used to detect differences between males and females within each variable We analyzed the demographic information and clinical variables using a Kaplan-Meier survival analysis and calculated the hazard ratio for returning to smoking. We conducted a multivariate analysis, using a Cox-proportional hazard analysis.

Results: Totally 98 people were taken into consideration. None of the participants received nicotine replacement within the treatment. The successful smoking cessation rate was 68.4%. The mean number of contacts in the program of smoking quit group is higher than failure group. Efforts to increase quit program adherence improve quit rates. Lower Fagerstrom test for nicotine dependence (FTND) score and a Carbon monoxide (CO) level (FTND score 1.39, CO level 3.31) are related to a successful smoking cessation rate. The following variables were also associated with significantly different smoking cessation rate: sex, the mean duration of smoking cessation, the number of cigarettes smoked daily, the number of telephone contacts, the number of Short Message Service (SMS). Using a multivariate analysis, female gender, the older age and the lower number of visits ($\leq$ 7) related to increased risk for returning to smoking.

Conclusions: This first evaluation of health center-based smoking cessation program in South Korea showed that the factor related to adolescent smoking cessation. We conclude that CO level, FTND level, and the number of contacts in the program positively affects the outcomes in the smoking cessation clinic. Based on these results, a more general quit smoking approach could be taken for the youth.

P 48. Augmentation of Drug Treatment with Bright Light Therapy in Patients with Difficult-to-Treat Depression: Acute and Long Term Observation

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Background/Aims: Difficult-to-treat depression (DTD) represents a common challenge for clinicians who often must develop more efficacious treatment approach focusing on multidisciplinary competences and augmentation strategies. A growing number of clinical studies support the usefulness of chronotherapeutic interventions, such as light therapy (LT), in the

treatment of major depression. In this study, we investigated the benefits of LT in DTD patients alongside ongoing medication and examined the added effectiveness of the combined treatment protocol both in the acute phase and during a long-term observation.

Methods: Nineteen DTD outpatients, both unipolar and bipolar, affected by a major depressive episode were treated by LT (10.000 lux, 30 min daily for 3 weeks) combined with ongoing antidepressant or mood stabilizer drug treatment. Difficult-to-treat depression was identified according to Rush criteria. Effectiveness was rated using the 21-items Hamilton Depression Rating Scale (HDRS) and the Visual Analogue Scale (VAS) over 3 weeks. A prospective 12-month follow up visit was programmed to check the recurrence of a depressive episode.

Results: Significant improvements of depressive symptoms were observed in both objective (HDRS) and subjective mood ratings (VAS). Seven patients (36,8%) were in remission (50% or greater changes in HDRS) 2 months after starting LT treatment and five of them (71,4%) maintained this responsiveness at one year follow-up. Repeated measures analysis of variance with changes in the HDRS scores as dependent variable and with time as independent factors showed a significant improvement in depressive symptoms over time ($F(5, 75) = 9,378$; $p = 0.000$). A Bonferroni correction, used to make post hoc analysis, confirm a significant reduction in HDRS scores since week 1 of LT ($p < 0.02$).

Discussion: The study results support the usefulness of LT as an adjunct treatment in DTD patients. When combined with ongoing medication, LT induced a rapid improvement in depressive symptoms and could be helpful in triggering an acute response without early relapse.

P 49. Behavioral effects of prenatal exposure to 4-para nonylphenol: studies on female and male mice subjected to Novel Object Recognition Test

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Endocrine-disrupting chemicals (EDCs) are known to cause hormonal disturbances, including their influence on action of sex hormones and brain feminization as well as differentiation of primary and secondary sex characters. Interestingly, recent studies demonstrated that some EDCs operating in utero and perinatally may lead to strong and stable abnormalities of developing nervous system. These abnormalities might result in impairments of cognitive functions (e.g. learning difficulties, ADHD, schizophrenia, autism) as well as in motor and sensory disturbances.

In our study we investigated the effects of prenatal exposure to 4-para nonylphenol (4-NP), a compound from the alkyphenols group, on the mouse cognitive functions. According to the EU directive, 4-NP is on the list of harmful substances to humans and the environment from 2003. However, this compound is still present in plastics, cosmetics and detergents.

In our experiment CD1 Swiss Albino mouse offsprings were prenatally exposed to 4-para nonylphenol from 6st to 20th embryonic days. One- and four-months animals were subjected to Novel Object Recognition Test. Additionally, locomotor activity was monitored to exclude unspecific behavioral effects of 4-NP. Our study demonstrated that prenatal treatment with 4-NP impaired the object recognition of juvenile one-month old females and males, i.e. the animals were not able to recognize a new object and spent statistically more time to explore an object presented previously. This disturbance was also observed in adult four-months old males, but not in adult females. Our data demonstrated that prenatal exposure to 4-NP caused cognitive impairments in juvenile mice of both sexes and in adult males, thus pointing to the gender- and age-dependent response of developing nervous system to this EDC.

Acknowledgements

P 50. Anxiety in Unipolar and Bipolar Depression (Preliminary Data)

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Background: Anxiety is about to achieve the status of a DSM-V mood disorder specifier. As a temperamental feature, anxiety is associated with neuroticism and vulnerability to mood disorders [1]. Anxiety disorders comprise the commonest psychiatric comorbidity of the bipolar spectrum [2].

Aims: To find if anxiety as a symptom, personal trait, temperamental characteristic, or comorbid disorder can be instrumental to the early differentiation of bipolar from unipolar depression.

Methods: DSM-IV-TR and M.I.N.I. were used for diagnosis in this pilot cross-sectional study of 31

consecutive patients (24 females and 7 males) aged 21 to 60 years (mean 48.3), consulted and/or treated for major depressive episode of at least moderate severity (CGI-S $\geq$ 4). Symptomatology was assessed by BISS [3], state and trait anxiety by STAI [4], and type of temperament by TEMPS-A [5]. Two distinct groups were compared: 1) recurrent major depression (RMD) (n = 6): at least 5 years duration of illness; no previous (hypo)manic/mixed episodes; no first-line relatives with bipolar spectrum disorders, and 2) depressive patients with well-established diagnosis of bipolar disorder (n = 25; 12 BDI and 13 BDII).

Results: BISS: current reported, observed, and/or somatic symptomatic anxiety was more frequent in RMD than in BD (3.00: 2.48, p = 0.25; 2.33: 1.72, p = 0.35, and 3.30: 1.88, p = 0.034, resp.).

STAI: BD patients had higher state (59.4: 49.5, p = 0.046) and trait anxiety than RMD patients (57.96: 52.0, p = 0.21). BD patients with comorbid anxiety disorders displayed the highest mean group STAI score.

TEMPS-A: Anxious characteristics were common and as frequent in RMD as in BD (0.66: 0.63, p = 0.79). TEMPS-A anxiety scores correlated well with STAI trait anxiety scores (0.457; p = 0.01).

M.I.N.I.: 50% of RMD and 16% of BD patients (p = 0.078) had history of generalized anxiety disorder, panic disorder, or social phobia.

Conclusions: High trait anxiety may be an important prerequisite for the development of mood disorders while state anxiety may be more prominent in BD than in RMD.

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P 53. Impact of mood disorders on family functioning: couples' perspective

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Mood disorders have been acknowledged as one of the main current health issues with deep impact on family functioning. Acute episodes of mood disorders tend to have an intense and rather painful effect in interpersonal relationships. Specifically, in Bipolar Disorder, manic and depressive episodes influence perception and behavior of patients experiencing them, and their partners. Along with the acknowledgment of the family as a main element in the treatment and outcome maintenance in these disorders, research in this area is increasing (Miklowitz, 2008; Danese & Pariante, 2008; Goodwin & Jamison, 2007).

In this study we aimed to compare family functioning of Bipolar Disorder, and Major Depressive Disorder patients, taking into account the couples' perspective. The study was conducted with 40 participants, 10 Bipolar Disorder patients and 10 Major Depressive Disorder patients and their spouses. Family functioning was assessed with Family Adaptabilty and Cohesion Evaluation Scale – III (Olson, Portner, and Lavee, 1985).

Results showed that, patients with mood disorders and their partners perceive their families as dysfunctional, reporting high levels of family dissatisfaction. Family adjustment seems to be lower in the families with Bipolar Disorder patients.

Despite the team's efforts results scarcely reflect the reality of this population in Portugal. The patients evaluated were women, and the effects of environmental, educational, and social variables were not accounted for. This work provided a first analysis of a sample of the population with mood disorders in Portugal, concerning not only the patients, but also those that are close to the patients: their spouses. Future research in this field will allow designing clinical intervention programs aimed at promoting the quality of family and marital functioning, considering the specific features of this clinical group.

P 54. Attentional set-shifting in children: Effects of individual differences in anxiety and attentional control

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Background: Cognitive processes influence and are influenced by emotional processes. A cognitive process that has proven useful for investigating the relation between cognition and emotion involves shifts in attentional focus (Wilson et al 2007). Changes in

task sets allow for an efficient development of our day-to-day-activities.

The attentional control theory (ACT; Eysenck et al., 2007) provides a unifying theoretical framework that accounts for the effects of anxiety on cognitive performance. According to ACT, anxiety impairs attentional control which leads to performance decrements in executive functions. A growing body of evidence points to the fact that high anxious individuals experience various executive functioning deficits. However, there is limited developmental evidence about the impact of trait anxiety on the shifting function, particularly during mid-childhood.

Aims: The current study aimed to investigate attentional shifting in a sample of early school age children using a task-switching paradigm (adapted from Johnson, 2009) which required participants to alternate between emotional and non-emotional judgments.

Methods: We tested 86 children (42 girls) aged between 8 and 11 years (M = 9,66, SD = 0,86) recruited from a local school. All children were administered the computerized experimental task individually. Each child undertook both the feedback and non-feedback versions of the task.

Results: Results indicate that: (1) higher levels of trait anxiety were associated with longer response times, but only when trial-by-trial feedback was provided, (2) only children with poor attention control capacity experienced such anxiety-related deficits, (3) the effect of anxiety was not exacerbated in the trials that made more demands on executive resources (switching versus repetition trials) and (4) regardless of anxiety levels and of stimulus valence, the costs of disengaging an emotional set were smaller than those for engaging an emotional set.

Conclusions: Our results partly support the Attentional Control Theory (Eyesenck et al., 2007) and open an interesting line of investigation into the relationship between feedback and anxiety in executive tasks.

P 55. Life stressors and alcohol use in adult men and women: Coping Strategies and alcohol expectancies as mediating factors

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Background: Several studies have examined the relationship between life stressors and alcohol use. However, the direction and strength of the reported effects are not consistent, suggesting the need to consider mediating and moderating factors to more fully understand the relationship.

Aims: The present study examined the relationship between life stressors and alcohol consumption. Considered were the mediating role of coping strategies and alcohol expectancies, as well as the moderating effects of gender, social resources, and age.

Method: Examined were cross-sectional data from a survey of 310 Australian adults (88 men and 222 women) aged 18 to 86 years. Surveys assessed three indices of alcohol use (harmful use, drinking problems and consumption in previous month), life-stressing events, chronic stressors (e.g., finances), coping strategies, and alcohol expectancies. *Results:* Preliminary analyses showed that life-stressing events were weakly associated with drinking problems in men, and harmful use in women. Chronic financial stressors were associated with greater drinking problems in both men and women. Friend and work stressors were associated with harmful use in men, while home, spouse and financial stressors correlated with harmful use in women. Furthermore, home-related stressors correlated with greater consumption and drinking problems among women. The findings also showed that avoidance coping mediated the relationship between life stressing events and harmful alcohol use among women. Cognitive avoidance coping and tension reduction expectancies partially mediated the impact of financial and spouse stressors in harmful use of women. For men, tension reduction expectancies partially mediated the impact of work stress on harmful use, while social assertiveness expectancies fully mediated the impact of friend stressors on harmful use in men. In addition, tension reduction expectancies were directly related to alcohol use in both men and women.

Conclusions: The findings highlight both similarities and differences between men and women, and the need for these to be incorporated into the development and implementation of prevention and intervention programs.

P 57. Indices of serotonergic neurotransmission is associated with anxiety-related behaviour in rats

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Introduction: Numerous genetic studies imply variation in brain serotonergic neurotransmission as a determinant of differences in temperament in humans. Since the biochemical underpinnings of such associations are difficult to study in man, it is

of interest to explore if similar associations are at hand also in experimental animals. To this end, this study aimed at investigating (in rat) the possible association between inter-individual differences in anxiety-like behaviour on the one hand, and biochemical indices of serotonergic neurotransmission on the other.

Methods: 48 male Wistar rats were used. Inter-individual differences in anxiety-like behaviour were assessed using the elevated plus-maze. Three weeks later, the animals were sacrificed and the brains extracted. Expression of serotonergic genes in the raphe nuclei was determined using TLDA cards while HPLC was used to quantify monoamine levels in selected target areas.

Results: Animals exhibiting high levels of anxiety-like behaviour had significantly higher mRNA levels for several of the genes normally expressed by serotonergic neurons, such as those encoding tryptophan hydroxylase 2, amino acid decarboxylase and the serotonin transporter. Furthermore, these animals also exhibited significantly higher amygdalar serotonin levels.

Conclusions: The results support the notion that variation in the serotonin system is an important factor mediating inter-individual differences in behaviour with animals exhibiting stronger anxiety-like behaviour also displaying a biochemical profile consistent with increased brain serotonergic transmission.

P 58. Impact of pain on the outcomes of depression across age and gender

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Background: Patients with major depressive disorder (MDD) frequently suffer from concomitant pain symptoms, which are associated with higher depression severity and worse quality of life [1]. Prevalence and clinical presentation of depression varies between gender [2] and age groups [3]. The aims of this study were to determine the presence of painful physical symptoms (PPS) in different gender and age groups and examine its impact on depression outcomes.

Methods: Nine hundred and nine in- and out-patients from Asia presenting with a new or first episode of MDD (DSM-IV/ICD-10) were enrolled in a 3-month prospective observational study. Patient demographics, depressive symptoms (Hamilton Depression Scale, HAMD-17), overall severity (Clinical Global Impression Severity score, CGI-S), somatic symptoms (Somatic Symptom Inventory) and quality of life (Euro QOL -5D [4]) were assessed at and three months post-baseline. The presence or absence of PPS was determined as a mean score of 2 or more (on a 1 to 5 point rating scale) for 5 for pain-related items of the Somatic Symptom Inventory (abdominal, lower, joint, neck, heart and chest pain, headache and muscular soreness). The five questions on general health of the EuroQOL were transformed into utility scores using available UK population tariffs [5]. Patients were classified into three age groups (<40 N = 305; $\geq 40-<60$ N = 458; ≥ 60 N = 146). Linear regression models were fitted to assess the relationship between PPS at baseline and depression severity at endpoint and between PPS at baseline and quality of life at endpoint for each of the gender and age groups. The models were adjusted for marital status, in-outpatient treatment, country, age or gender and the baseline rating of the outcome scale (HAMD, EQ-5D, EQ-VAS).

Results: Mean age was 45.2 years (SD 14.2) and 69% were women. Older patients had higher HAMD17 severity at baseline. Females had more PPS at baseline, but there were no differences in age groups, neither overall nor by gender. Depression severity was higher in the older age (HAMD score 25.0 (SD 5.9) in ≥ 60 vs 22.7 (SD 5.4) in <40 and 23.9 (5.9) in $\geq 40-<60$; CGI-S score 4.9 (SD 0.7) versus 4.6 (SD 0.7) and 4.8 (SD 0.8), respectively). During follow-up, depression severity improved (HAMD17 at baseline 23.7 [SD 5.8] vsHAMD17 at three months 7.7 [SD 6.5]). There were no statistically significant differences in the degree of improvement by age or gender. PPS positive patients had worse outcomes across genders and age groups (fourteen out of the fifteen comparisons were statiscally significant). Patients with PPS had a higher depression severity at three months. Adjusted differences ranged from 1.1 in those younger than 40 years old to 3.0 of those older than 60 years old. Patients with PPS also had a lower quality of life at three months. EQ-VAS differences ranged from 6.4 in females to 7.9 in males. EQ-score differences ranged from 0.07 in males to 0.16 those older than 60.

Conclusions: The presence of painful physical symptoms is associated with a lower improvement in depression outcomes and a lower quality of life in patients receiving treatment for major depression across both genders and across different age groups.

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P 59. Cognitive Processes when using distraction as an emotion regulation strategy

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Distraction, which is one emotion regulation strategy and effective for reducing negative emotions, involves holding neutral and irrelevant information in working memory and thereby limiting attention to emotionally evocative aspects of a stimulus. In our daily life, when an event makes us have a negative effect, we sometimes think about, or do things that are unrelated to that affect. The cognitive process of reducing negative emotions by filling the working memory capacity with neutral and irrelevant tasks was investigated. Twenty-two college student participants conducted a lexical decision task judging if the targets were word (negative/neutral/positive) or non-word. Emotionally provocative (negative/ positive), or neutral pictures preceded the targets. Participants observed the pictures while reciting a four-digit number in reverse order (backwards condition), or counting from 1 to 4 (control condition). In the control condition, responses to positive words were faster than to negative or neutral words, when a positive or neutral picture preceded the word. When negative pictures preceded the word, response to positive words were slower compared with preceded positive or neutral pictures, but those were faster than to negative words. In the backwards condition, responses to words other than negative words were faster when positive pictures preceded them. When negative pictures preceded words, responses to positive words were faster than to neutral words and responses to negative words were faster than when neutral pictures preceded them. These results imply a memory bias toward positive when there is excess working memory, especially when there are no negative emotions involved. Moreover, when there is a high working memory load of irrelevant information, positive emotions promote information processing, with the exception of negative information. Furthermore, negative emotions promote the recall of positive and negative memories. These findings suggest that distracting negative emotions can successfully promote emotion regulation by leading us to recall positive memories. However a bias for negative memories may sometimes fail to reduce negative emotions when using distractions.

P 60. Ectomorphic somatotype and joint hypermobility as potential markers for co-morbid anxiety in Schizophrenia

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Aim: To evaluate whether the reported link between anxiety disorders and Joint Hypermobility Syndrome (JHS) still holds in the presence of schizophrenia and ascertain its clinical relevance.

Methods: Twenty schizophrenic case-patients (10 men and 10 women) with a comorbid anxiety disorder diagnosed by SCID-I at the psychiatric outpatient clinic of a general teaching hospital were compared to 20 schizophrenic control-patients without anxiety, matched by gender. Sociodemographic characteristics, Liebowitz Social Anxiety Scale (LSAS), Social Adjustment Scale (SAS), somatotype (Heath-Carter method), minor physical anomalies (Waldrop scale), and Hospital del Mar criteria for joint hypermobility (JHdMar) were also assessed.

Results: There were no significant differences by gender between cases and controls in terms of age, educational degree, marital status nor labor situation. Cases concerning men were significantly more ectomorphic (Z = 2.2, p = .023), more hypermobile (Z = 2.2, p = .025) and had less minor physical anomalies (Z = 2.7, p = .007) than controls. Cases concerning women were significantly more ectomorphic (Z = 2.6, p = .009) and more hypermobile

(Z = 1.9, p = .056) than controls. In the entire sample, JHS correlated positively with SAS (rho = 0.4, p = .004) and LSAS (rho = 0.33, p = .045).

Discussion: In patients with schizophrenia, the association between JHS, ectomorphic somatotype and the panic/phobic cluster of anxiety disorders seems to persistent. JHS is significantly related to social anxiety and to better social adjustment. It is a probable clinical biological marker of interest.

P 61. Ectomorphic somatotype and joint hypermobility are linked in panic patients

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Aim: To test whether there is an association between high body linearity or low corpulence, and panic and/or agoraphobia.

Method: Sixty cases (30 men and 30 women) with panic and/or agoraphobia diagnosed at the psychiatric outpatient clinic of a general teaching hospital were compared to 60 non-clinical controls, matched by age and gender. Sociodemographic characteristics, somatotype measured by Heath-Carter method, and joint hypermobility status were also assessed.

Results: Cases and controls did not differ in terms of educational (χ^2 = 2.85, p = .091) and marital (χ^2 = 1.22; p = .27) status nor labor situation (χ^2 = 2.33, p = .13). Mean age of the total sample was 31.4 (sd = 7.4) years. Two-thirds of cases were taking antidepressants. There were significant differences between mean somatotype groups both in men [cases: 3½ – 4½ – 2½; controls: 4½ – 5 – 1½] (t = 2.44, p = .018) and women [cases: 4 – 4 – 2½; controls: 5½ – 4½ – 1½] (t = 3.66, p = .0019). Men somatotype cases were significantly less endomorphic (t = 2.91, p = .005) and more ectomorphic (t = 2.28, p = .026) than controls. Women somatotype cases were significantly less endomorphic (t = 3.83, p = .000), less mesomorphic (t = 2.44, p = .018), and more ectomorphic (t = 2.91, p = .005) than controls. In the entire sample, after adjusting for educational degree, marital status, and labor situation, the cluster panic and/or agoraphobia was independently related to joint hypermobility status (OR = 6.54, 95% CI = 2.31 − 18.52, p = .000) and ectomorphic somatotype (OR = 3.75, 95% CI = 1.37 − 10.25, p = .037).

Discussion: Since panic and/or agoraphobia disorders may be associated with joint hypermobility syndrome (JHS), an inherited collagen synthesis, it is suggested that the relationship found between panic and/or agoraphobia and ectomorphic somatotype might be mediated through JHS. Our results provide some clinical support for examining somatotype and JHS in psychiatric patients.

P 62. Heart Rate Variability in Major Depressive Disorder

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Objectives: The sympathetic nervous system is activated in response to stress. Increased stress and dysfunction of the autonomic nervous system are also linked to increased occurrence of major depressive disorder. The aim of the present study was to compare heart rate variability(HRV) between different depression subtypes and severities.

Methods: We enrolled 40 patients who visited the psychiatric outpatient clinic of Asan Medical Center(AMC), Seoul, and who were diagnosed with a depressive episode by the DSM-IV-TR. Sixty control subjects were enrolled through the health examination center of AMC. The patients were divided into two groups endogenous depression and reactive depression in accordance with Korean Structured Clinical Interview for DSM-IV(SCID) and classified with different severities using the Clinical Global Impressions-Severity(CGI-S), Montgomery-Asberg Depression Rating Scale(MADRS), Bipolar Depression Rating Scale(BDRS) and Beck Depression Inventory(BDI) scales. HRV was measured using a QECG-3 heart rate monitoring system on the same day.

Results: In comparison with the control group, the depression groups showed a significantly lower complexity, standard deviation of all RR intervals(SDNN), HRV index, square root of the mean squared differences of successive NNs(RMSSD) in the time-domain and total power(TP), power in the very low frequency(VLF), low frequency(LF), high frequency(HF) ranges in the frequency-domain. The LF/HF ratio and proportion of adjacent NN intervals that differed by > 50ms(pNN50) were significantly higher. In a comparison of depression subtypes, endogenous depression had a higher HF value, and a lower LF/HF ratio than reactive depression. There was no significant correlation between the frequency-domain and depression severity.

Conclusions: Patients with major depressive disorder had a lower HRV than the control subjects. In addition, the patients with endogenous depression showed less decreased parasympathetic activities than reactive depression patients.

P 63. Mood And Anxiety Disorders In a Mental Health Unit

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Introduction: Prevalence and incidence of mood and anxiety disorders varies greatly between published epidemiologic reports. Several factors were found to be associated with heterogeneity among rates, including diagnostic criteria, diagnostic instrument, sample size, country studied, and response rate [1].

Objective: Establish the incidence and socio-demographic profile of the subgroups of patients with mood and anxiety disorders who come as first consultation to a Mental Health Unit.

Material/Methods: Retrospective and descriptive study of patients who come as a first consultation to a Mental Health Unit of the Galician coast (n = 785) for a period of 3 years. We designed a specific protocol and the diagnoses made by clinical interview following ICD-10 criteria.

Results: The most common diagnoses among the patients of the overall sample are anxiety (F40−48) and mood disorders (F30−39), in 45.5% and 24.2% respectively, and within these, Adjustment disorder and Dysthymia are the most frequent (> 50% in both groups).

Subgroup of patients with mood disorders: Average age of 55.55 ± 15 years (range between 23 and 92 years), predominantly women (81.1%) and married/with partner (63.2%). 73.2% live with couple and/or with children. 51.6% have a primary education. 35.8% are pensioners. 83.2% are referred by primary care doctors. > 50% have personal and family history of psychiatric disorders (72.6% and 51.6% respectively).

Subgroup of patients with anxiety disorders: Average age of 48.59 ± 16 years(range between 17 and 89 years). 66.4% women. 65.5% are married/with partner. 69.7% live with couple and/or with children. 49.3% have a primary education. 40.4% have indefinite employment (21.6 pensioners). 80.1% are referred by primary care doctors. < 50% have

personal and family history of psychiatric disorders (39.5% and 47.6% respectively).

Conclusions: Most of the patients in these two groups are referred by primary care doctors and are middle-aged women, who live with couple, present personal and have primary studies. However there are more pensioners in subgroup of mood disorders and present higher frequency of personal and family psychiatric history.

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P 64. Searching for biological markers of mood disorders: monoamines, neurotrophic factors, cellular respiration and related parameters

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Objectives: Leading role in pathophysiology of mood disorders and therapeutic effects of antidepressants could be awarded to disturbed monoamine neurotransmission, dysfunction in energy metabolism of neurons, and changes in activities of transcription factor CREB, neurotrophic factor BDNF, glycogen synthase kinase 3 (GSK-3) or other components involved in neuroplasticity and apoptosis. The aim of the present study is to discover the relation between these parameters and clinical evaluation during depressive episode.

Methods: Selected neurobiological parameters were measured in the peripheral blood of patients in depressive episode and in controls: activity of serotonin transporter, activity of monoamine oxidase, plasma concentrations of homocysteine, cortisol, prolactin and melatonin, activities of transcription, neurotrophic and antiapoptotic factors, activities of enzymes of citric acid cycle and activities of complexes of respiratory chain.

Results: Citrate synthase activity was found slightly decreased, activity of Complex II was decreased and activities of Complex I or Complex IV were unchanged in depression. However, treatment with antidepressants led to changes in activities of all these enzymes (except for Complex II) with opposite effects in drug-naïve patients. The ratio pCREB/CREB was not significantly modified and pGSK as well as the ratio pGSK/GSK were decreased in

depression. Activities of platelet serotonin transporter and monoamine oxidase were markedly changed during treatment of depression. Plasma concentrations of cortisol and prolactin were increased, melatonin was decreased and homocysteine was unchanged in depression.

Conclusions: Sensitive and specific genetic, biochemical, physiological, neuroendocrine or other biological tests are not known so far that are capable of diagnosing mood disorders and their subtypes or to predict efficacy of pharmacotherapy. We suppose that the results of our project could contribute to improve the understanding of mood disorders or to predict therapeutic response to treatment with antidepressants.

Acknowledgements

P 65. Rational-Choice Theory of Neurosis: Development and Treatment

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Freud's psychoanalytical theory of neurosis has encountered serious problems, whereby the term neurosis was excluded by the DSM for the lack of empirical criteria and research that challenges the existence of repression, the "cornerstone on which the whole structure of psychoanalysis rests" (see review by Rofé, 2008).

Moreover, rival theories, including psychoanalysis, are incapable of accounting for fundamental issues, such as high prevalence of neuroses among women, the profound difference between Western and non-Western, and the fluctuation of prevalence over different time periods (e.g., the striking increase in eating disorders, dissociative identity disorder). Another fundamental issue is the inability to integrate the various therapeutic interventions into one model.

The Rational-Choice Theory of Neurosis (Rofé, 2000, 2010) redefines neurosis by providing five objective criteria and claims that neuroses are consciously and deliberately adopted to cope with intolerable levels of stress. The main function of neurosis is a form of repression, redefined as intentional distraction. Patients consciously and deliberately choose specific neurotic disorders in order to eliminate stress-related thoughts that currently dominate

their attention. Thus contrary to Freud, repression is the consequence, rather than the cause of neurosis. Patients create unawareness by unique psychological processes which cause the forgetting of the knowledge of self-involvement and the development of self-deceptive beliefs, which rationalize the maintenance of the symptoms. RCTN accounts for all aforementioned problems, including the integration of all therapeutic interventions. This revolutionary approach not only has important implications for the psychological sciences, but also for the legal system, as it implies that people are responsible for their behaviors, which seemingly appear to be outside their conscious control.

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P 66. Are there reasons to panic? Work insufficiency, poverty, widowing, relationship at risk, encounter with death and/or disability as "candidate stressors"

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Aim: Evaluation of relationship between the current burdensome life circumstances ("candidate stressors") and the presence and severity of the panic attacks symptom.

Method: Medical records of 3929 patients of a day hospital for neurotic disorders. Analysis of the relationship between the presence of burdensome life circumstances reported in an interview and a subjectively declared occurrence and extreme intensification of the panic attacks symptom, carried out by logistic regression.

Results: In females statistically significant were the following relations: maximal intensity of panic symptom with the presence in more than one close person: paralysis ($OR = 4.46$), mental illness, or

suicide (OR = 4.45), and serious problems of children (OR = 2.54); the occurrence of panic with drop of position at work (OR = 1.80) and poverty (OR = 1.72). In the group of males extremely severe panic symptoms were associated with: becoming a widower (OR = 9.57), the death of more than one child (OR = 6.38), insufficiency at work (OR = 5.07); and the occurrence of panic attacks with serious illness of siblings such as, for instance, paralysis (OR = 3.64), diabetes (OR = 11.64), and quarrels with a partner accompanied by calling the police (OR = 2.68), alcohol abuse by a partner (OR = 3.64), job difficulties (OR = 2.43), sense of being worse from a partner (OR = 1.81).

Conclusions: Situations that are particularly burdensome for the patients: being widowed, poverty, job difficulties, contact with death and diseases of closest people are clinically associated with symptoms of panic disorder. The obtained results confirm that not all of the circumstances affect all patients in the same way (psychological phenomenon analogous to the incomplete gene-phenotype penetration), therefore they can be given the status of "candidate stressors".

Conflict of Interest

P 67. Anxiety as a state and trait in the course of PTSD in a group of people persecuted for political reasons in Poland

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Aims: To examine and differentiate short- and long-term symptoms of anxiety in the course of PTSD.

Methods: The methodology involved conducting psychiatric and psychological examinations of people who were persecuted for political reasons in Poland in the period 1939–1956. The Spilberger State-Trait Anxiety Inventory (STAI) was used to check the levels of anxiety. The group included 201 traumatised people with diagnosed PTSD. None of the patients had ever received psychiatric treatment. All those with other symptoms (e.g. dementive) or who had

suffered subsequent trauma of other genesis were excluded from the group.

Results: The results of the State-Trait Anxiety Inventory indicate that:

1. There was a high level of anxiety symptoms in both aspects throughout the group of those with a PTSD diagnosis.
2. There was an above-average incidence of symptoms of momentary anxiety (State scale).
3. Symptoms of anxiety as a constant personality characteristic (Trait scale) also occurred more often than the averages set for societies and are more aggravated in people who were exposed to the trauma in early childhood.

Conclusion: Altogether, this study confirmed the high (above-average) level of anxiety on both scales, manifesting as short- and long-term symptoms clearly visible even many years after the trauma. The symptoms recognised in this group constitute a permanent element of the personality and thus influence the overall functioning of the subjects.

Conflict of Interest

P 68. The comorbidity of PTSD and depression as a late-onset effect of trauma in a group of people persecuted for political reasons in Poland

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Aim: To examine the comorbidity of PTSD and depression as a late-onset effect of trauma.

Methods: The methodology involved conducting psychiatric and psychological examinations of people persecuted for political reasons in Poland in the period 1939–1956. The Hamilton Depression Scale was used to check levels of depression. The group included 259 traumatised people with diagnosed PTSD. None of the patients had ever received psychiatric treatment. All those with other symptoms (e.g. dementive) or who had suffered subsequent trauma of other genesis were excluded from the group.

Results:

1. Over 57% of those with a PTSD diagnosis obtained results indicative of the occurrence of depression.
2. Logarithmic - normal setting confirms that symptoms of depression occur widely in people who cannot be diagnosed with depression using the Hamilton Scale.
3. The mean (16.3) and median (15) averages are at the level of light depression.
4. People exposed to the trauma in early childhood have a similar intensity of depression as those who were exposed to the trauma in later life. The averages are at the same level.

Conclusion: Depression is a very common disorder associated with PTSD as a late-onset sequel of trauma. However, about 50 years after the trauma mostly light or subclinical symptoms of the depression are observed.

Conflict of Interest

There is no conflict of interest, the study was not sponsored, it was financed with the statutory funds for research purposes of Jagiellonian University in Krakow (K/ZDS/002318). It was carried out with the consent of the Jagiellonian University Bioethics Committee.

P 69. Prevalence of Depressive Disorders in Chaharmahal va Bakhtiary Province of Islamic Republic of Iran (2011)

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Introduction: Depression is a common disorder among people. It is usually accompanied with low energy, hopelessness, helplessness, and suicide. It causes disturbance in job performance, interpersonal and social relations. The purpose of this research was to study the prevalence rate of depressive disorders and symptoms among Chaharmahal va Bakhtiary Province population ages 15 and above in 2011.

Methods: 1032 population of Chaharmahal va Bakhtiary Province was selected by a random cluster sampling method and then they participated in screening depressive test (Beck Depressive Inventory).

Findings: The results showed that depressive disorders are about 15.3% of subjects. Furthermore, this study showed that hopelessness with 69.5% is a most prevalent symptom in the population.

Conclusion: The high prevalence of depressive disorders and some of depressive symptoms such as hopelessness and loss of pleasure among population suggest a broader investigation and prevention programs such as positive psychology and family happiness strategies by mental health authorities.

P 70. Psychosocial and Medical Variables of Depression in HIV/AIDS patients in Kano, Nigeria

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Background: Depression in HIV /AIDS patients often go unrecognised in the clinic, and are not treated or referred, resulting in psychological morbidity which possibility affects compliance, and may breed drug resistance. The objective of the study is to identify the psychosocial and medical variables of depression in HIV/AIDS patients in, Kano, Nigeria.

Methods: The study is descriptive and cross-sectional, and was carried out over a period of 24 weeks at Aminu Kano Teaching Hospital, Nigeria. The study population included HIV/AIDS patients admitted into the hospital's medical wards, and those attending the HIV/AIDS clinic, the main referral clinic for HIV/AIDS patients in Kano. A socio demographic questionnaire and the Hospital Anxiety and Depression (HAD) Scale questionnaire were administered to the patients. Respondents who scored 8 and above on the screening instrument (HAD) were further assessed by the depression module of CIDI for depression and its severity classified in to mild, moderate and severe. The severity of depression in patients found to be depressed by CIDI was further graded in to mild, moderate and severe using Hamilton depression rating scale (HDRS).All patients consenting to participate in the study were assessed at one sitting and this reduced loss to follow-up.

Results: The identified Psychosocial variables of depression in HIV/AIDS patients in this study include Past history of psychiatric illness, perception of the illness, feelings of stigma, job problems, sexual problems, and educational problems while the only identified medical variable is CD4 cell count. The multivariate logistic regression among the discrete variables revealed that sexual problem with the opposite sex ($p = 0.0148$) and patients' perception of illness ($p = 0.0045$) are the significant predictors of depression in the subjects

Conclusions: Clinicians attending to HIV/AIDS patients be vigilant to detect depression in the patients, guided by clinical features and risk factors, with a view to referring such patients to psychiatrists.

P 71. *In vitro* and *in vivo* effects of the multimodal antidepressant vortioxetine (Lu AA21004) at human and rat targets

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Introduction: The investigational multimodal antidepressant vortioxetine (Lu AA21004) acts via the modulation of serotonin (5-HT) receptors and 5-HT transporter (5-HTT) inhibition [1,2].

Objectives: The extensive use of rats in preclinical research calls for comparisons of binding and functional properties of vortioxetine at rat (r) and human (h) 5-HT receptors and 5-HTTs.

Methods: In vitro binding affinities and *ex vivo* occupancies were determined by radioligand binding. *In vitro* efficacies were established using cell-based electrophysiological recordings ($r5-HT_3$ and $h5-HT_3$), cAMP HiRange and calcium mobilization and assays ($r5-HT_7$ and $h5-HT_7$, respectively), cellular dielectric spectroscopy assays ($r5-HT_{1D}$ and $h5-HT_{1D}$), membrane-based GTPγS assays ($h5-HT_{1A}$ and $h5-HT_{1B}$), and inhibition of $[^3H]5-HT$ uptake ($r5-HTT$ and $h5-HTT$). Reference compounds were included to relate assay values to those in the literature.

Results: Vortioxetine *in vitro* binding affinities:

	K_i (*nM*)	
	Human	Rat
$5-HT_3$	3.7[1]	1.1
$5-HT_7$	19[1]	200[2]
$5-HT_{1D}$	54	3.7
$5-HT_{1B}$	33[1]	16[2]
$5-HT_{1A}$	15[1]	230
5-HTT	1.6[1]	8.6

In vitro, vortioxetine bound more potently to human than rat $5-HT_{1A}$ and $5-HT_7$ receptors and 5-HTT, whereas the opposite was found for $5-HT_{1D}$ and $5-HT_3$ receptors. In the rat, the *in vitro* and *ex vivo*

potency rank orders were in agreement. The *in vitro* functional studies showed that vortioxetine is a $5-HT_3$, $5-HT_7$ and $5-HT_{1D}$ (Kb 25nM and 43nM for human and rat, respectively) receptor antagonist, $5-HT_{1B}$ receptor partial agonist, $5-HT_{1A}$ receptor agonist and 5-HTT inhibitor [1,2].

Conclusions: Comparison of target activity and occupancy between animals and humans is useful for the interpretation of preclinical findings in a clinical setting. The $5-HT_{1D}$ receptor was identified as a new target for vortioxetine.

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P 72. Living with Depression: A Personal and Professional Perspective

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This paper will feature the work of American psychoanalyst Deborah Serani, Psy.D, and the psychodynamic effects of her clinical use in the personal disclosure of a major depressive disorder in the memoir/self-help book "Living with Depression." Mental illness is not only one of the most stigmatized conditions in the world, its corrosive effect is higher now than ever before (Stout, 2004). In fact, the general public reports being twice as likely today to fear a person with mental illness than fifty years ago (Dingenfelder, 2009). The World Health Organization (2008) predicts that if nothing more is done to address mental illness and erase stigma by the year 2020, depression will be the leading cause of disability for men, women and children in industrialized countries. This whole person approach of accepting one's biology and understanding one's biography is what Serani puts forth in "Living with Depression." In this workshop, Serani will explore the multifaceted aspects of her depression from both her personal experience as a child growing up with it, and as a clinical expert treating mood disorders in the mental health field. She will also address how disclosure of one's personal journey with illness can be treatment productive for patients, and shed light on how stigma in our own profession needs to be addressed. It will be clear that Serani's unique personal and professional perspective about living with, and specializing in the treatment of depression will leave audience members confident that there's always hope - and there's always healing to be found.

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P 74. Associations of depressive symptoms with serum concentrations of thiobarbituric acid reactive substances (TBARS): clinical trials

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Depression is a highly debilitating disease, which represents the fourth leading cause of disability worldwide and is expected to become the second most prevalent disease after ischemic heart disease by 2020. Depressive disorders are heterogeneous and diagnosed on the basis of a patient's symptoms, not on the basis of a laboratory test. Therefore the search for biomarkers for depression is partially due to need of finding of diagnostic adjuncts. Biological markers may give an insight into the underlying biological basis of depression, which can be used to develop more effective drug treatments.

Recent evidence suggests that oxidative stress markers such as malondialdehyde (MDA, the end product of lipid peroxidation) and several biometals may be involved in the pathophysiology of depression. Therefore, the aim of this study was to examine the level of MDA (assessed through the levels of thiobarbituric acid reactive substances - TBARS), zinc and magnesium in serum from subjects diagnosed with unipolar (n = 35) and bipolar (n = 25) depression or healthy/control (n = 20) subjects. Our preliminary results showed significantly higher level of TBARS both in unipolar (by 46%) and bipolar (by 49%) depression versus control subjects. In addition, in unipolar group of patients lower levels of zinc (by 33%) and magnesium (by 17%) were observed. The changes in the level of TBARS, but not biometals were normalized by antidepressant therapy (remission).

This preliminary data suggest that TBARS may be a new potential clinically useful state marker and biometals such as zinc and magnesium - trait markers of depression. These results require confirmation in a larger group of patients.

P 75. Aviophobia: Evaluation of a treatment program reducing anxiety of flying

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Background/Aims: Aviophobia, a specific type of anxiety disorder, is defined as an irrational fear of flying. This study aims at exploring whether a 2-day cognitive-behavioral group treatment reduces anxiety in persons suffering from aviophobia. Findings from previous studies have demonstrated that cognitive behavioral treatment seems to be effective to help people reduce flight anxiety (Van Gerwen et al., 2004).

Methods: The sample (N = 76) comprised a training and a control group as well as 4 follow-up groups of participants of previous years'. Fear of flight was measured with the Flight Anxiety Situations (FAS) and the Flight Anxiety Modality (FAM) questionnaires.

Results: A between-group comparison performed with a Kruskal-Wallis ANOVA showed significant differences for the anxiety experienced before and during the flight, as well as for the presence of somatic and cognitive symptoms. Comparing training and follow-up groups with the control group revealed clinically relevant decreases in emotions and symptoms related to anxiety. Pre- and post-treatment results of the training group also indicated that the program was effective in helping participants to reduce their flying phobia.

Conclusions: For clinical implications, further exploration of the underlying mechanisms of fear of flying are important, especially considering that flight anxiety can have a negative impact on quality of life and on psychosocial well-being. In addition the role of pharmacotherapy, in decreasing the anticipatory anxiety prior to an entrance into phobic situations is discussed.

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P 76. Long Term Management Of Major Depression: Difficulties And Challenges

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Introduction: Long term management of major depression in real world is less studied. This makes it more difficult to find personalized strategies and solutions for the patients in need. **The aim of the study:** to determine which are the main difficulties in the long term management of major depression in patients in a communitary psychiatric setting and how are they reflected in the quality of life.

Material/Method: The patient sample was selected from the patients monitored in Mental Health Centre nr.1 of Timisoara. In the first six months of the year 2011 there were 181 patients with Major Depressive Disorder (MDD) who received professional care. The instruments used where: Clinical Global Impression Scale for Severity (CGI-severity), Global Assessment of Functioning (GAF) Scale, Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q).

Results: The average duration of treatment maintenance for MDD patients is variable. The number of recurrences is higher in the first years of evolution. Patients with somatic comorbidities become more adherent. Patients included in the present study show the lowest scores in the social domain of quality of life.

Conclusions: On long term the management of major depression requires continuous care and a multidisciplinary approach. The therapeutic options are various and need to be more specific for the stage of the illness. The adjustment of therapeutic plan must be individualized.

P 77. Impulsivity, executive functions, mild neurological signs and character traits in bipolar disorder patients

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Objective: The aim of the study was to find out whether patients with bipolar disorder (BD) differ from healthy controls (HC) according to particular mild neurological signs, executive functions, levels of impulsivity and character traits.

Methods: We report preliminary data of 13 DSM-IV BD I patients (manic and mixed) (69% women, mean age 44.7 ± SD: 14.8) and 14 HC (43% women, mean age 44,1± SD: 16.7). HC did not meet criteria for any Axis I disorder. All the patients were evaluated by the HAM-D and the YMRS. Impulsivity was measured by the Barratt Impulsiveness Scale (BIS-11). Executive functions were examined by the Digit span-backwards, the TMT-B and the Stroop test. Mild neurological signs were assessed by the Heidelberger Scale. Additionally, all subjects completed the Cloninger's Temperament and Character Inventory (TCI) and were evaluated using the Purdue Pegboard Test (PPT). All procedures were approved by the local ethical committee.

Results: In comparison to HC, BD patients had significantly higher BIS-total scores and BIS-motor subscores ($p < 0.05$), on the BIS-attentional subscale there was a trend toward significance ($p < 0.09$). BD patients performed worse on the Stroop interference task and the TMT-B task ($p < 0.05$) compared to HC. In addition BD patients had significantly more mild neurological signs ($p < 0.01$) and lower scores on the right hand subtest of the PPT ($p < 0.01$) in comparison to HC. There was a positive correlation between BIS-total scores and the Stroop and Heidelberger scores and a negative correlation between BIS-total scores and the right hand subtest scores of the PPT. BD patients scored significantly higher than HC on self-transcendence ($p < 0.01$) and persistence ($p < 0.05$), measured by the TCI.

Conclusions: Our preliminary results point that BD patients have higher levels of impulsivity than HC. Moreover BD patients have more soft neurological signs and are executively impaired in comparison to HC. Mild neurological deficit could contribute to the higher impulsivity scores observed in BD patients.

Acknowledgement

P 78. Does Serotonin Depletion Augment or Counteract the Aggression-Provoking Effect of Testosterone in Mice?

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Background: While sex hormones increase aggression in most mammals, the neurotransmitter serotonin has been reported to exert the opposite effect. Since testosterone influences various indices of serotonergic transmission, one possibility would be that it exerts its pro-aggressive influence by reducing a tonic anti-aggressive serotonergic influence. Alternatively, the hormone and the transmitter may regulate aggression by parallel, independent paths.

Objectives: The present study aimed at investigating the validity of the interaction models proposed above by assessing if testosterone is capable of enhancing aggression also in the absence of serotonin. On the assumption that testosterone enhances aggression by reducing serotonergic output, serotonin depletion would be at least as effective as testosterone in enhancing aggression, and no additional pro-aggressive effect of testosterone above that induced by serotonin depletion would be found.

Methods: Male C57Bl/6 mice were gonadectomised, implanted with slow release testosterone or blank pellets and housed individually after 3 weeks of recovery. Following 9 days of isolation, during which territorial behaviour was established, baseline aggression was assayed using the resident intruder paradigm. Starting the next day mice were treated with the serotonin synthesis inhibitor para-chlorophenylalanine (pCPA) or saline for 3 days and retested 24 hours after the final dose of pCPA.

Results: While both groups of testosterone-treated animals displayed enhanced aggression as compared to hormone-depleted animals, serotonin depletion did not enhance aggression in mice lacking testosterone, and did hence also not diminish the difference between testosterone-treated and hormone-depleted animals. On the other hand, serotonin depletion did enhance aggression further in testosterone-treated mice.

Conclusions: Our result does not indicate that testosterone elicits aggression by reducing serotonergic transmission, but suggests i) that serotonin may exert a parallel dampening effect on testosterone-induced aggression, and ii) that presence of testosterone is an indispensable prerequisite for serotonin depletion to enhance aggression.

P 79. Correlation between socio-demographic factors and psychosis at Albanian immigrants returned in Albania

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Background: The experience of migration can negatively influence mental health (Furnham & Bochner, 1986) and immigrants may have an increased risk for mental health disorders and distress when compared to non-immigrants (Breslau, et al., 2007). The present data are part of a wider research on Albanian immigration and psychosis.

Aim: To see the correlation between immigration factors and most frequent psychotic symptoms of the participants in the study.

Methods: study sample was made up of 41 Albanian individuals (M:F = 4.9:1), presenting at University Hospital Center "Mother Teresa" Tirana during six months, with psychotic symptoms and a history of Immigration. Mean age of the subjects was 33.7 years. Semi-structured interviews that utilized several cross culturally validated questionnaires were conducted with all participants, Personal and Psychiatric History Schedule and Structured Clinical Questionnaire for DSM-IV. Non-parametric statistics (Kruskal Wallis) tests were used to determine if the immigration factors were associated with type of psychotic symptoms.

Results: The most commonly reported type of trauma was material deprivation (73%), followed by death or disappearance of family members (55%), witnessing violence (43%). Greater numbers of immigration factors were significantly associated with higher levels of persecutory delusions ($\chi^2 = 168.4$, p = .001), auditive commanding hallucinations ($\chi^2 = 42.1$, p = .001), and intrusive thoughts ($\chi^2 = 34.1$, p = .001). Acculturation factors were significantly negatively correlated (r = −0.29, p<.001) as well as language acculturation (r = −0.31, p<.001) and social acculturation (r = −0.24, p<.001).

Conclusions: It is the first study on mental health of Albanian immigrant people in Albania and very important for recommendations in future research in this target group.

P 80. Perception of Children's anxiety from their Overprotective parents at Albanian Child and Adolescent Psychiatry Clinic

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Background: There is a marked increase in the role of perceptions of parents and professionals identifying of problems in preschool children (Verhulst, & Verloove-Vanhorick, 2004). Only 2−5% of consultations of children and adolescents include presentations with

emotional or behavioral problems (Garralda, 2002). Anxiety disorders are among the most common psychiatric problems experienced by children and they appear to remain stable and problematic for many youngsters throughout childhood and adolescence.

Aim: This presentation aims to see the way how the children with symptoms of anxiety disorders arrive at the Child/Adolescent Psychiatry Clinic of University Hospital Center "Mother Teresa" (CAPC).

Methods: 100 parents of children presented at CAPC, participated in this correlational study and completed different parent questionnaires during the first study session. Questionnaires asked for information about their own personal feelings as well as the child's feelings, symptoms, and behaviors. Age range was between 6 to 17 years, 58% of them were female. Inclusion criteria were anxiety disorders and exclusion criteria were mental retardation, current or past diagnosis of autistic spectrum disorders, current or past diagnosis of psychotic disorders.

Results: there was a significant statistical correlation between overprotective parenting and the number of false positive cases presented at CACP to seek care.

Conclusions: Results of this study may contribute to the future treatment of children with anxiety disorders.

P 81. Depression and Generalized Anxiety Disorder in Cancer Patients in Singapore

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Background: Past research has indicated that distress, anxiety and depression may occur in cancer patients during the course of their illness and treatment. Currently, psychiatric conditions of cancer patients in Singapore have not been thoroughly studied.

Aims: This study aims to establish the prevalence of depression and generalized anxiety disorder in cancer patients in Singapore. It also describes the clinical characteristics of these patients, and strives to determine if cancer patients with a psychiatric diagnosis differ from those without the same.

Methods: Cross-sectional anxiety and depression symptom data were collected using the MINI International Neuropsychiatric Interview from inpatients presenting to a tertiary hospital.

Results: In all, 315 patients were interviewed. 48 (15.2%) of the patients were diagnosed with depression, while 29 (9.2%) were found to have generalized anxiety disorder, much higher than the prevalence in the general population. Oncology patients with depression or anxiety tend to be unemployed, in

stage 4 cancer and can present at any time from the diagnosis of cancer, even when perceived social support is strong. The clinical characteristics of cancer patients with a psychiatric diagnosis did not differ from those without the same.

Conclusions: The psychological impact of cancer is appreciable. The lack of identifiable risk factors makes the task of diagnosing psychiatric conditions in cancer patients an onerous one. The psychiatrist involved may want to look beyond socio-demographic variables and consider biological factors in cancer to better help detect psychiatric morbidity in this group of patients.

P 82. Characteristics of self-compassion and self-disgust on attachment styles

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Background: The development of self-compassion is an important strategy in many evidence-based psychotherapies such as cognitive behavioral therapy (McKay & Fanning, 1992) and dialectical behavioral therapy (Linehan, 1993). Exercises of self-compassion and sympathy have been shown to reduce the levels of shame, anxiety, and depression (Gilbert & Procter, 2006). Conversely, self-disgust is associated with mood disorders, social anxiety, personality disorders, and other problems (Gilbert, 2000). Those who struggle with such disorders experience more self-criticism and shame and fewer warm feelings and less sympathy toward oneself (Gilbert, et al., 2004). The ability to experience self-compassion has been shown to be acquired through relationships and associated with attachment styles (Irons et al., 2004). It is discussed that compassion-focused therapy stimulate soothing affect regulation including lowering heart rate and cortisol level, and that the effectiveness of it may relate to their attachment styles (Rockliff, et al., 2008). Hankin (2005) also shows that attachment style plays a role in developing depressive symptoms.

Method: This study aims to explore attachment styles, self-compassion, and self-disgust. Three questionnaires, Self-Compassion Scale (Neff, 2003), ECR-GO Scale (Nakao & Kato, 2004), and Self Disgust Scale (Mizuma, 1996) are provided to 175 Japanese college students (113male, 58female) who participate in the study. Subscales of those scales

include self-judgment, kindness to self, mindfulness, isolation, and abandonment anxiety.

Result: Subscales of Self-Compassion scale are shown to have moderate correlation with abandonment anxiety. Furthermore, those with secure and avoidant attachment styles are related to self-compassion, and ambivalent and disorganized attachment styles are related to self-disgust.

Conclusion: Therefore, it is important that psychological intervention to foster self-compassion accommodates to individuals' attachment styles, especially to ambivalent and disorganized attachment styles. The authors discuss possible interventions that reflect attachment styles and foster self-compassion.

P 83. Preliminary results on the validation of a French translation of the Screen for Cognitive Impairment in Psychiatry

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A disorder in cognition has always been considered to be one of the core symptoms of depression. Despite the ubiquity of deficits in cognition in depression and other psychiatric disorders, the evaluation of this dimension in clinical practice is rudimentary at best. Access to neuropsychological testing is limited for reasons of cost and availability. Computerized batteries are too cumbersome for clinical practice. The Screen for cognitive impairment in psychiatry has been developed as a brief 15-minute paper and pencil screen that is sufficiently sensitive to be useful for the level of cognitive impairment seen in patients with major psychiatric disorders. It has been validated for use in schizophrenia and bipolar disorder (Pino and coll. 2008, 2009). It has been shown to predict cognitive impairment in clinical populations

(Cuesta MJ 2011). Given the pertinence of cognitive evaluation to determining a personalised treatment plan and to evaluating the impact of treatment, our group has developed a French translation of the SCIP. The three English versions were first translated into French, and then back-translated into English. The three versions are in the process of being tested in a healthy population of 36 women and 36 men (36 women, and 28 men have completed the protocol). Subjects complete a demographic questionnaire, a subjective evaluation of cognitive function, and a Sheehan disability scale. Each subject is administered a version of the SCIP, and another on a subsequent visit, a week later. A brief neuropsychological evaluation is also completed. We will present preliminary results of the psychometric properties of the French version of the SCIP. This tool is an important addition to the clinical evaluation, and will allow assessment and treatment to be optimised.

P 84. Childhood trauma, Resilience and Depression

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Background: It is well-established that childhood trauma (emotional, physical neglect /abuse) increases the risk of developing mood disorder in adult life.

We investigated the severity of early traumatic experiences and the resilience of patients with mood disorders; then we analyzed correlations between the early traumatic experience and psychopathological dimensions.

Methods: 136 subjects with a diagnosis of Mood Disorder, according to the criteria of the DSM-IV-TR and affected by current major depressive episode (MDE) referring to Day-Hospital of the Institute of Psychiatry of the Catholic University in Rome were consecutively considered for the study.

Baseline psychometric assessments included measures of depressive and anxiety symptoms (HDRS and HARS) and some specific psychopathological dimensions of depression such as retardation, pleasure and aggression (DRRS, SHAPS, AQ).

The level of social adjustment was measured with the SASS, the resilience with the CD-RISC and childhood abuse with the CTQ.

Depressed group was compared to 100 healthy controls homogeneous for age and gender, in which psychiatric disorders were excluded using the MINI.

Results: Significantly higher levels of childhood trauma were reported in depressed patients than in the healthy subjects. Depressed females reported higher rates of childhood trauma than depressed males.

Firstly we found that the levels of early psychological neglect were positively correlated to high levels of anxiety ($p < 0.5$), but at the same time they negatively correlated to the amount of resilience and social adaptation ($p < 0.5$).

Severity of childhood abuse and early traumatic exposure correlated significantly with a lesser degree of resilience in patients, although we did not find a statistically significant difference between gender and resilience.

The study confirmed significant positive correlation between aggressiveness and CTQ.

Conclusions: Early emotional neglect would contribute more to the development of complex psychopathological dimensions than other forms of child abuse. Future research should investigate resilience as an environmental and genetic protective factor, in order to further our understanding of the correlations between childhood trauma and depression.

P 85. Early Improvement as a Predictor of Outcome (Response & Readiness for Discharge) in Bipolar I Patients with Manic/ Mixed Episodes: Post-hoc Analyses of Asenapine Studies

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Aim: To determine whether early improvement in manic symptom improvement predicts outcome (response to treatment and readiness for hospital discharge) in bipolar patients experiencing manic or mixed episodes.

Methods: Data from two 3-week trials [1,2]; asenapine (10 or 20mg daily, dose divided between morning and evening; n = 372), olanzapine (5–20mg daily; n = 391), and placebo (n = 197) were pooled for these post-hoc analyses. Improvement (defined as ≥ 15% reduction from baseline in YMRS total score) was assessed on days 2, 4 and 7. Associations between early improvement and response at week 3 (≥ 50% decrease in YMRS total score) were calculated using Fisher's exact test; odds ratios classified their relative strength. Readiness for hospital discharge was defined as the first visit the investigator answered yes to the question "Based on your clinical judgment of symptomatic improvement, and independent of social or economic factors, is this subject ready for discharge?" [3] Time to discharge was estimated using Kaplan Meier method. P-values of the distribution difference between treatment groups were from a log-rank test.

Results: Early improvement was positively associated with response on week 3. The earliest significant associations occurred with asenapine on day 2 ($P < 0.04$), olanzapine on day 4 ($P < 0.02$) and placebo on day 7 ($P < 0.003$). Odds ratios between early improvement and response were numerically higher for asenapine (2.2–9.1) than olanzapine (1.4–3.5) and placebo (1.5–4.9). Among early improvers on day 7, 98.2% of the asenapine-treated patients were ready for discharge at study end, compared to 76.9% and 89.6% for placebo and olanzapine respectively; the overall difference versus placebo was statistically significant for asenapine ($p = 0.02$) but not for olanzapine ($p = 0.15$).

Conclusion: Early improvement was positively associated with week 3 response. This association was more robust with asenapine. In addition, patients with early improvement were more likely to be prepared for discharge from hospital when treated with asenapine compared to placebo.

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P 86. A Survey of Patient Preferences for a Placebo Orodispersible Tablet

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Introduction: Adherence to medication is a significant problem with all chronic illnesses, particularly for depression. Non-adherence is associated with an almost doubling of relapse/recurrence and 30−40% of patients discontinue medication prematurely. In recent developments in attempting to improve adherence, drug delivery has received scant attention. The development of an oral dispersible tablet (ODT) of escitalopram justifies re-evaluation. An ODT has obvious applications in patients with swallowing difficulties, not only after upper GI surgery or patients with neurological disorders such as Parkinson's disease, but has not been investigated in patients with anxiety and depression.

Aim: To conduct a study on swallowing difficulties in 150 patients currently receiving treatment

with conventional antidepressant tablets and with significant ongoing symptoms of anxiety or depression.

Results: 37% of patients had trouble with swallowing tablets and patients with higher depression scores reported more general swallowing problems than those with lower scores (p = 0.002). About half (50.7%) of all patients thought that a tablet that melted in the mouth would make it easier to take regularly. The convenience of being able to take a tablet while out of the house (93.8%), that it does not need to be swallowed with water (79.1%), and that could be taken without work colleagues/acquaintances seeing them (72.3%) were also perceived as advantageous. Most patients (75.3%) believed that an ODT might work faster but that it would make no difference to the effectiveness of the medication (63.1%) or the number of side effects (81.3%). 96% of the patients reported experiencing a pleasant taste following the placebo ODT, although 7 patients did not like its taste or aftertaste. 80.7% found that the tablets were easy or very easy to get out of the packaging.

Conclusions: We may currently underestimate the difficulties which depressed and anxious patients have in swallowing tablets and the impact which this may have on adherence to medication. Escitalopram ODT may help address this problem.

P 87. Illuminating the emotional experiences of shame and guilt behind symptoms of depression and anxiety

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Mood and anxiety disorders are inherently emotional in nature, and can have severe negative implications for functioning in a variety of important life domains. Shame and guilt are self-conscious emotions that have been associated with the onset, persistence and desistance of clinical disorders such as depression and anxiety. While shame has been linked to self-devaluation that includes feelings of worthlessness, guilt focuses on specific behaviours, involving feelings of regret and remorse.

This paper examines the cross-cultural experience of shame and guilt and its relationship with depressive and anxious symptoms during early adulthood, a period where large differences in the development of shame and guilt have been observed (Orth, Robins, & Soto, 2010). 303 participants from Australia and Singapore completed a questionnaire that included measures of shame, guilt, and psychological well-being. Shame and guilt-proneness were

measured using the Test of Self-conscious Affect (TOSCA-3) and the Interpersonal Guilt Questionnaire – Separation Guilt Subscale. Depressive and anxious symptoms were measured using the Depression Anxiety Stress Scales (DASS-21). While no differences were found in shame-proneness between both cultures, Singaporeans were found to experience greater separation guilt than Australians. Despite this, moderate to high correlations between shame and guilt-proneness and symptoms of depression and anxiety were found to exist for Australians only. Preliminary results indicate that the aspect of self-devaluation that defines shame may have negative consequences for psychological well-being among Caucasians, whose identities are heavily invested in an autonomous self. In contrast, shame and guilt, in Asian cultures, may work as protective factors that facilitate psychological well-being.

The result is an example of how culture-specific models are shaped by the mediation of depression, anxiety and shame and guilt. The cultural understanding of shame and guilt in its relation to the causes, consequences and correlates of depression and anxiety could assist in illuminating the emotional experiences linked to depressive and anxious symptoms, and could greatly aid the treatment of Mood and Anxiety disorders.

P 88. Arts therapies practice with adults suffering from depression in the UK

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Objectives: While 'global burden' of depression is being spoken of, arts therapies might present a relevant treatment option. Arts therapies disciplines in the UK include: art psychotherapy, dance movement psychotherapy, music therapy and dramatherapy. Although there is evidence that arts therapies are used extensively with depression, the range and effectiveness of these interventions remain unclear. The findings from phase 1 of this research provide a description of most common practice of arts therapies with depression and form a basis of a protocol development for phase 2, in which this practice is evaluated. This poster illustrates the results of phase 1 and introduces phase 2.

Design: This research combines sequential and concurrent mixed methods procedures and consists of two phases with qualitative data embedded within generally quantitative design. In phase 1 (now completed), the survey among arts therapists in the UK was conducted. In phase 2 a pilot clinical trial is

conducted with adults with depression as participants.

Methods: All arts therapists registered in the UK were invited to complete the online questionnaire, concerning their practice in general and in relation to clients with depression specifically. The survey was advertised through arts therapies Associations and other professional groups and received 395 responses.

Results: Groups of arts therapists who work mainly with depression and those who do not work with depression were identified and compared on factors corresponding to theoretical approaches. Significant difference was found between groups in relation to psychodynamically informed practice. Other aspects of practice were also explored and qualitative analysis of open-ended questions revealed themes concerning therapists and their clients, which enabled further understanding.

Conclusions: The findings are predicted to have practical implications in clinical practice of arts therapists and other professionals interested in the treatment of depression.

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