

importance of temperament traits such as high HA and low RD to explain the co-occurrence of both social anxiety and ED is highlighted.

### P0355

Internet-based cognitive-behavioral therapy for bulimia nervosa: A controlled study

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**Objectives:** To examine the effectiveness of an Internet Based Therapy (IBT) for Bulimia Nervosa (BN), when compared to a brief psychoeducational group therapy (PET) or a waiting list (WL).

**Method:** 93 female BN patients, diagnosed according to DSM-IV criteria. An experimental group (31 IBT patients) was compared to two groups (31 PET and 31 WL). PET and WL were matched to the IBT group in terms of age, disorder duration, previous treatments and severity. All patients completed assessment, prior and after treatment.

**Results:** Considering IBT, mean scores were lower at the end of treatment for some EDI scales and BITE symptoms scale, while the mean BMI was higher at post-therapy. Main predictors of good IBT outcome were higher scores in EDI perfectionism and higher scores on reward dependence. Drop-out was related to higher SCL-obsessive/compulsive ( $p=0.045$ ) and novelty seeking ( $p=0.044$ ) scores and lower reward dependence ( $p=0.018$ ). At the end of the treatment bingeing and vomiting abstinence rates (22.6% for IBT, 33.3% for PET, and 0.0% for WL;  $p=0.003$ ) and drop-out rates (35.5% IBT, 12.9% PET and 0% WL;  $p=0.001$ ) differed significantly between groups. While the concrete comparison between the two treatments (IBT and PET) did not evidence significant differences for success proportions ( $p=0.375$ ), statistical differences for drop-out rates ( $p=0.038$ ) were obtained.

**Conclusions:** The results of this study suggest that an online self-help approach appears to be a valid treatment option for BN, especially for people who present lower severity of their eating disorder (ED) symptomatology and some specific personality traits.

### P0356

Eating attitudes among adolescents

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**Introduction:** Eating disorders are major problems in many countries of the world. They are especially prevalent during adolescence and early adulthood, because society equalizes thinness with beauty and attractiveness in women. It is not surprising that women tend to be preoccupied with losing weight and achieving a slim body at young age.

**Method:** The study examined the relationship among BMI, diet, body satisfaction, weight and eating behaviour. Research of the sample includes high school students of both sex from Banjaluka aged between 15 and 18 (female 360, male 250). A sample of adolescents was screened with eating attitude test (EAT-26). They also answered

to the questions about self reported weight and height, diet and body satisfaction.

**Results:** Comparing self report of body satisfaction and BMI we found a statistical significance ( $p=0,0001$ ) and frequency of using diets ( $p=0,0001$ ). EAT was compared with BMI ( $p=0,07$ ) and body satisfaction was statistically significant ( $p=0,0001$ ). BMI was also important for using diets ( $p=0,01$ ).

**Conclusion:** In the study we found relation between body satisfaction, BMI and frequency of using diets. It could be first the step in the development of eating disorders. BMI does not have influence on EAT score. It is necessary to use this knowledge in the future to design preventive programs for individual risk of developing eating disorders and for directed interventions for changing socio cultural pressures on the behaviour.

### P0357

The relationship between eating disorders, physical activity and obesity in women and men - an epidemiological study in Norway

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The relationship between eating disorders, physical activity and obesity among Norwegian men and women has received increasing interest during recent years. Eating disorders (ED) is commonly referred to among women. Very few studies have been done focusing on male ED. In the present study we present data for both genders.

In the present study, a total of 11000 postal questionnaires were sent out at 3 different time points; 1991 (women 18-60), 2004 (women 18-65), and 2005 (men 18-65 years) in Norway. The total response rates were 74.9%, 45.8%, and 41%, correspondingly.

The main aim of the present study was to study the relationship between eating disorders, physical activity and obesity among Norwegian men and women in the general male population in Norway.

**Results:** Preliminary analyses suggest less increase in the prevalence of eating disorders among women between 1991 and 2004 than expected. More men than expected with symptoms of ED. Detailed prevalence numbers for the different eating disorders according to DSM-IV, age cohort analyses, as well as analyses on the relationships between eating disorders, physical activity, and obesity will be presented in April.

### P0358

Bulimia nervosa vs. binge eating disorder: Common and differential clinical and personality correlates

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**Aims:** The objective of this study was to analyze clinical and personality differences in three groups of patients with eating disorders:

binge eating disorder (BED), bulimia nervosa-purging type (BN-P) and bulimia nervosa-non purging type (BN-NP).

**Methods:** The participants were 102 female patients (34 BED, 34 BN-P and 34 BN-NP), mean age 28.7. Assessment measures included the following tests: EDI-2, BITE, EAT-40, SCL-90-R and TCI-R, and other clinical and psychopathological indices that were collected via semi-structured interview.

**Results:** When compared all three groups, BED were the oldest group, showed more frequent familial history of obesity and current or lifetime obesity. Regarding psychopathology, BN-P patients showed the most pathological scores, followed by BN-NP patients and BED patients showing the least pathological scores. Specifically, BN-P patients showed statistically higher scores than BED patients on SCL-90-R Paranoid Ideation, EAT-40 total score, EDI-2 Impulsivity subscale, and BITE Severity subscale. No statistically significant differences were observed among groups, on personality traits. A two-step cluster analysis procedure was conducted, to determine the clinical proximity among the three diagnostic groups. The relationship between cluster classification and diagnosis was statistically different ( $p < 0.001$ ), so we can assume that the present classification maybe does not classify accurately eating disorders.

**Conclusions:** Even when BED patients present differential characteristics with respect to family and personal antecedents when compared to BN patients, clinical and psychopathological overlapping with BN-NP makes them similar. Likewise, our results suggest deficiencies in the current nosological system, since it does not group patients' subgroups which are homogeneous enough.

## Poster Session I: Brain Imaging

### P0359

Imaging of the serotonin-2A receptor in the canine brain: Before and after pipamperone administration

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**Background and Aims:** Recent publications have drawn attention to the role of serotonin-2A receptors in mood disorders. Low doses of atypical antipsychotics, like the butyrophenone pipamperone, are suggested as an augmentation strategy in the antidepressant treatment of mood disorders, in addition to conventional antidepressant therapies.

Functional imaging studies with highly specific receptor ligands allow quick assessment of drug-receptor occupancy at different doses of drugs - here pipamperone at 5mg and 10mg doses - in a large animal model.

**Methods:** Three healthy drug-naïve female Beagle dogs, aged 7 years, were included.

Dogs were scanned before treatment and after administration of one dose of pipamperone of 5mg and 10 mg, 90 minutes prior to injection of the tracer. Acquisition was performed under general anaesthesia 90 minutes after injection of the tracer. The acquisition for both investigations was performed with a triple head gamma camera equipped with LEHR collimators. The images were reconstructed with HOSEM iterative reconstruction and application of a Butterworth-postfilter (cut-off 1,2 cycles/cm, order 8).

**Results:** The mean binding serotonin-2A binding index before treatment in the frontal cortex was 1.47. In the 5 mg pre-treatment condition, the binding index was reduced to 1.29 and in the 10 mg pre-treatment condition, it was reduced to 1.04. Non-parametric statistics (Friedman related-samples test) yielded a p-value of 0.05.

**Conclusion:** Even in the very low dose range (5mg-10mg) of pipamperone, there was a significant and dose-dependent reduction in serotonin-2A binding index in the three dogs.

### P0360

Visual rating and volumetry of hippocampus on magnetic resonance imaging in Alzheimer disease

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**Background and Aims:** Early and focal atrophy of medial temporal lobes on magnetic resonance imaging (MRI) in patients with Alzheimer disease (AD) can be measured in several ways.

**Methods:** In 20 patients with probable Alzheimer disease and 29 cognitively normal elderly medial temporal lobe atrophy (MTA) was measured by volumetry using manual tracing of the hippocampus. The volume of the hippocampus was also rated into five categories expressed as MTA scores ranging from 0 (no atrophy) to 4 (severe atrophy) using a simple and quick semiquantitative method according to the published combined widths or the height of selected three mediotemporal structures.

**Results:** In comparison to controls, AD patients had significantly smaller volume of either hippocampus (median volume of the hippocampus Hipp dx: 1,81 vs 2,23  $p=0,001$ ; Hipp sin: 1,60 vs 2,14  $p=0,003$ ; Hipp bilat: 3,40 vs 4,31  $p=0,0004$ ). The total MTA score of both sides were significantly higher in AD patients (median 4) than that in controls (median 1) ( $p=0,0004$ ). Nearly 60 % cognitively normal seniors had the MTA score  $\leq 0,5$ . A similar proportion of patients with AD (65 %) had the MTA score  $\geq 2$ .

**Conclusions:** Hippocampal loss of tissue can be detected by visual rating and volumetry on MRI in patients with AD. Visual MTA rating is the easier and quicker method than more accurate and time consuming volumetry to support the diagnosis of AD on the brain MR imaging.

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### P0361

Delta-9-tetrahydrocannabinol modulates parahippocampal and ventral striatal activity during processing of verbal memory