

a medical point of view, the use of antidepressants has not been associated with reduction of suicidal behavior. In BPD, the only treatment showing a consistent reduction of suicidal behavior is the maintenance therapy with lithium salts.

### S34.04

Suicidal behaviour in the forthcoming classifications of mental disorders

E. Vieta. *University of Barcelona Hospital Clinic, Barcelona, Spain*

While suicidal behavior is not necessarily always related to the presence of a mental illness, most psychiatric conditions carry a higher suicide risk over the general population, and the lethality of suicidal behavior is clearly correlated with the presence of mental disorder. Hence, it is quite striking that suicide and related behaviour are barely addressed in the currently official classifications of mental disorders. The forthcoming classifications DSM-V and ICD-11, to be due around 2012, should address the mentioned shortcomings of their predecessors. The best way to emphasize the importance of suicidal behavior is to facilitate its assessment across all mental conditions, and this should likely be done by means of dimensional assessment. Hence, both DSM-V and ICD-11 should include a dimensional module which would be complementary to the categorical module, and which would include, among other features, the assessment of suicide risk. As suicide is a behaviour linked to other relevant features also poorly covered in current nosology, such as impulsivity, guilt, and sometimes violence and psychosis, the dimensional assessment should also address all those psychopathological items. The categorical module should be refined and more data-driven. Other modules should include all the relevant information coming from biomarkers, physical health, psychological traits, social environment, treatment response, and family history, including family history of suicide. A major change in the classificatory systems should hopefully lead to better assessment of suicide risk and increased awareness on this issue by mental health care providers, resulting in more effective prevention of suicide.

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## 8 April 2008 Core Symposium: Phenotype genotype endophenotype and the development in eating disorders

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### CS08.01

Gene-environment interaction in anorexia nervosa

A.F.K. Karwautz<sup>1</sup>, G. Wagner<sup>1</sup>, K. Waldherr<sup>5</sup>, F. Fernandez-Aranda<sup>3</sup>, I. Krug<sup>3</sup>, M. Ribases<sup>3</sup>, J. Holliday<sup>2</sup>, D.A. Collier<sup>4</sup>, J.L. Treasure<sup>2</sup>. <sup>1</sup>*Department of Child and Adolescent Psychiatry, Vienna, Austria* <sup>2</sup>*Institute of Psychiatry, University of London, London, UK* <sup>3</sup>*Hospital Bellvitge, Barcelona, Spain* <sup>4</sup>*Social, Genetic, and Developmental Centre, University of London, IOP, London, UK* <sup>5</sup>*University of Vienna, Department of Psychology, Institute for Psychological Basic Research, Vienna, Austria*

**Purpose:** To analyse GxE interactions assess non-shared environmental (E) risk factors for the development of AN specific for sisters discordant for an ED, polymorphisms in the serotonin transporter (G).

**Methods:** We interviewed 128 sister pairs discordant for an eating disorder using the Oxford-RFI as part of the European "Healthy Eating" multicenter study at 3 university centres (Vienna, London, Barcelona) (AN-R: 58; AN-BP: 70; 128 sisters without ED). To examine association between AN, G and E, and G x E-interaction, conditional logistic regression was used with a Cox proportional hazards regression model using the exact method.

**Results:** Genotype (GT) distributions did not differ between the sister groups. Significant main effects were found for disruptive events, interpersonal problems and family dieting behaviour. The risk for AN increased with higher levels in these variables independently of the genotype. Significant interactions were found for G x parental problems and G x burden by parental psychiatric disorder. The increase of risk for AN with increasing number of problems with parents is larger for the S/S genotype than for L/L. However, a higher burden by parental psychiatric illness (subjective E according to Turkheimer 2000) increased the risk for AN-this was larger for the L/L than for the S/S GT.

**Conclusions:** This study suggests that there is an interaction between stress (problems with parents) and the ss GT which increases the risk of developing AN.

### CS08.02

Developmental continuities in eating and nutrition

F. Fernandez-Aranda<sup>1</sup>, I. Krug<sup>1</sup>, D. Collier<sup>2</sup>, A. Karwautz<sup>3</sup>, J. Treasure<sup>2</sup>. <sup>1</sup>*Department of Psychiatry, University Hospital of Bellvitge and CIBEROBN, Instituto Carlos III, Hospitalet del Llobregat, Spain* <sup>2</sup>*Institute of Psychiatry, de Crespigny Park, Denmark Hill, London, UK* <sup>3</sup>*University Clinic of Neuropsychiatry of Childhood and Adolescence, Vienna, Austria*

**Background and Aims:** The research on the aetiology of eating disorders (EDs) has implicated many apparently disparate risk factors, which include: biochemical, genetic, familial and psychological factors. In the environmental domain, the presence of particular traits such as perfectionism, comorbidity in the family, eating patterns during childhood and exposures to adverse events have been revealed to be implicated in the aetiology of EDs. Whereas, from a biological point of view some recent new findings have suggested the important role of genetic factors, in combination with share and non-share environmental factors, developmental factors seems to have also a crucial role in the development of EDs later in life.

**Method:** In order to replicate these findings in a larger sample, we performed several combined population (case-control) and family-based studies of eight independently recruited samples from several European countries participating in the European Community Framework V "Factors in Healthy Eating" project. We analyzed as well genetic as environmental factors, but also developmental factors that might be implicated.

**Results and Conclusions:** The findings of our studies agree with the growing body of research indicating that a variety of environmental and social factors are associated with unhealthy individual and family eating patterns during childhood and early adolescence, and which if not detected early could result in the development of a subsequent eating disorder.

### CS08.03

Cognitive inflexibility in anorexia nervosa - An FMRI perspective

H.C. Friederich<sup>1</sup>, A. Zastrow<sup>1</sup>, S. Kaiser<sup>1</sup>, C. Stippich<sup>2</sup>, K. Tchanturia<sup>3</sup>, W. Herzog<sup>1</sup>. <sup>1</sup>*Psychosomatic and Internal Medicine,*

University Hospital, Heidelberg, Germany <sup>2</sup>Neuroradiology Department, University Hospital, Heidelberg, Germany <sup>3</sup>Eating Disorder Research Unit, Institut of Psychiatry, London, UK

**Background and Aims:** Anorexia nervosa (AN) patients show remarkably rigid control over eating and exhibit persistent and obsessive temperament traits. Neuropsychological studies have shown minor impairments in cognitive flexibility in AN patients. The aim of the present study was to investigate alterations of the functional neuroanatomy in AN patients performing a cognitive flexibility task.

**Methods:** Thirteen female subjects aged 18 to 26 years with chronic AN (8 with the purging subtype) and 15 age-matched healthy female controls (HC) underwent functional magnetic resonance imaging while performing a reactive flexibility task. In an event related paradigm, participants had to respond with a different button press to infrequent target stimuli embedded in the prepotent presentation of standard stimuli. The performance to the task was quantified as reaction time and number of correct trials.

**Results:** On behavioral level, AN patients and the HC group showed a similar performance (reaction times, number of correct trials) in the reactive flexibility task. During correct behavioral shifts, the AN patients compared to the HC group showed decreased activation of the bilateral thalamus, ventral anterior cingulate gyrus (ACC), ventral insula, dorsolateral prefrontal (DLPFC), premotor cortex, visual stream and cerebellum ( $p$  uncorr. < .001).

**Conclusions:** AN patients show an impaired activation in thalamo-(striato)-cortical loops involved in response selection and behavioral shift. These findings support from a neurobiological perspective a more generalized cognitive rigidity in AN, that is not restricted to food, weight and shape.

## CS08.04

The cycle of risk. The factors involved in the transmission of eating disorders between mothers and children

F. Monneyron<sup>1</sup>, N. Micali<sup>2</sup>. <sup>1</sup>*Département de Psychiatrie de L'Adolescent, Institut Mutualiste Montsouris, Paris, France*  
<sup>2</sup>*Department of Child and Adolescent Psychiatry, Institute of Psychiatry, London, UK*

**Background:** Complex psychiatric disorders develop from interactions between genetic and environmental factors. Offspring of women with a history of an eating disorder (ED) are a high risk group due to a combination of both genetic vulnerability and rearing/environmental factors.

**Aim:** The aim of this study is to examine the clinical features and also the experiences of mother-daughter dyads where both mother and daughter have had an eating disorder in order to explore factors that may impact on risk for and outcome in eating disorders.

**Method:** Mother-daughter ED dyads participated in a study that used a combination of quantitative and qualitative methodologies.

**Results:** the quantitative assessment found marked differences distinguishing ED mothers from control mothers (with no ED history), particularly in areas such as caregiving, eating attitudes and personality traits. The qualitative assessment identified an important phenomenological interaction between the mothers' and daughters' experiences of an eating disorder.

**Conclusion:** These results shed light on the significant role and impact of a mother's eating disorder when her offspring develops the same illness. The study's findings highlight the need to take these

possible transmission factors and the impact of maternal ED into account in clinical practice.

## Presidential Symposium: Forensic psychiatry issues in Europe

### PS02.01

The role of forensic psychiatry in mental health systems in Europe

N. Nedopil. *Department of Forensic Psychiatry, Psychiatric Hospital, University of Munich, Munich, Germany*

Forensic Psychiatry seems different from one country to another due to different historical developments, legal systems and mental health systems. There are, however, several common goals of Forensic Psychiatry shared across countries, e.g.

- To assure treatment for severely mentally ill patients who became delinquent and to give evidence to courts in cases where the responsibility due to mental illness is in question
- To prevent relapse of mentally disordered offenders

This work has to be done in the interface of Law and Psychiatry and mostly needs an interdisciplinary approach. Forensic Psychiatry has developed special knowledge and skills which pertain especially to violence and sexual deviance, to risk assessment and management and to the incorporation of techniques developed in neighbouring disciplines.

On the other hand the specialisation of psychiatry into several sub-disciplines has led to the loss of some of these skills in general psychiatry and to a "forensification" of some of its patients.

From these developments new fields of interest arise both for general and forensic psychiatry:

- How to prevent mentally ill from becoming forensic patients
- How to prevent mentally ill from becoming victims of crime
- How to intervene in the vicious circle from victim to perpetrator

Research on these topics is just beginning and neither general nor forensic psychiatry will be able to achieve practical progress if they try to reach it independently. So I plead for a close integration of forensic psychiatry into the mental health system and for intensive exchange of knowledge and skills.

### PS02.02

The interface between general and forensic psychiatry

H. Gordon. *Oxfordshire and Buckinghamshire Mental Health Partnership Trust, University of Oxford, Oxford, UK*

The relationship between General and Forensic Psychiatry has a long history, being for the most part constructive, but also characterised by tension and conflict. The mentally abnormal offender has been welcome neither in general mental health services nor in prisons. In nineteenth and twentieth century asylums and mental hospitals, the mixing of "criminal lunatics" with "ordinary lunatics" was unavoidable but not usually preferred. With the opening of mental hospitals from the 1950's, the admission of mentally abnormal offenders became more problematic. From the 1970's, medium secure units were built to assess and treat mentally disordered patients posing a significant risk to others, leaving only those posing the most serious risk to the Special (High Security) Hospitals. The placement of psychopaths and sex offenders posed especial complexity. Additionally some patients not convicted in a court but prone to serious violence or absconding from hospital may also require forensic placement.