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**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

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**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

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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 subdisciplines has lead to the loss of some 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

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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.