

## W07. Workshop: DO BRAIN IMAGING AND NEUROPHYSIOLOGY DIFFERENTIATE BORDERLINE DISORDER AND DEPRESSION?

### W07

Do brain imaging and neurophysiology differentiate borderline personality disorder and depression?

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The workshop will give an overview of distinct neurophysiological and brain imaging studies with patients suffering from Borderline personality disorder and from depressive affective disorder. The contribution of Jose Manuel De la Fuente will report findings of sleep EEG recordings of patients with Borderline personality disorder (BPD), Major Depression (MD), Recurrent Brief Depression (RBD), and of controls. It was detected that BPD patients expressed less slow wave sleep than MD and RBD patients without BPD. Oliver Pogarell performed a radioligand brain imaging study that revealed an increase of the availability of the specific serotonin transporter (SERT) in the hypothalamus and brain stem of BPD patients which is in contrast to the findings of a SERT decrease in patients with depression. Christine Norra recorded event-related auditory evoked potentials (AEP) obtained through the application of various loudness stimuli. The strong loudness dependency of AEP in patients with BPD correlated with aspects of impulsiveness which may point to a serotonin disturbance in this disorder. Thomas Zetzsche and his colleagues performed a quantitative volumetric magnetic resonance imaging (MRI) analysis of temporolimbic regions in patients with BPD and MD. They found a significant increase of amygdala volume both in BPD patients with comorbid MD and in MD patients without BPD. Comparison of abnormal neurobiological findings between BPD and MD could provide a better insight into potential differences but also into similarities of the pathophysiology of these important psychiatric disorders.

## CS04. Core Symposium: CHANGING PATTERNS OF SUICIDE IN EUROPE

### CS04.01

Changing patterns of suicide attempts in Europe

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Similar to the different suicide rates in Europe (also in EU countries) also the European suicide attempt rates in various areas are quite different. The results of the WHO Multicentre Study on Suicidal behaviour show a ratio between the catchment area with the highest suicide

rates (Tallin) and the catchment area with the lowest rates with 1: for males and 1: for females. Over the period covered by the study the rates changed, however the rank order between the various catchment areas remained stable, thus showing that the differences can not only be caused due to different assessment procedures. In all catchment areas the suicide attempters belonged more often to the lower social classes, were more often unemployed and showed in general more detrimental social factors. Repetition of suicide attempts were often made in a relatively short period after the first suicide attempt. One reason for this can be that the time lag before the uptake of the first psychotherapeutic treatment (appointment) for many cases was very long, more than 20% of the patients had the first psychotherapeutic treatment only after six months. Also the stability of the therapeutic contacts was not very consistent after the suicide attempt: many patients had contacts with more than five care providers. This pattern changed only a little during the period under investigation.

### CS04.02

Changing suicide rates in western and central Europe

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Although suicide is a very complex, multicausal behaviour, Hungarian and international results show that untreated or unsuccessfully treated major depressive episode is the leading cause of suicide, particularly in the presence of other suicide risk factors. However, large-scale, long-term clinical follow-up studies clearly demonstrate that appropriate acute and prophylactic pharmacotherapy of major mood disorders substantially reduces the suicide mortality even in this high-risk population.

Between 1980 and 2003, in Western and Central Europe, out of the 13 countries with high baseline suicide rates (20 or more) in 1980/1981, 10 countries (Denmark, Hungary, Austria, Switzerland, Estonia, Slovenia, Latvia, Finland, Czech Republic and Belgium) showed decrease (in average: 26.9%, range: 6-57%), and 3 countries (Lithuania, Russian Federation Ukraine) showed increase (in average: 15.7%, range: 10-25%). Out of the 16 countries with low baseline suicide rates (less than 20) 9 countries (Sweden, Germany, U.K., Norway, Greece, Slovakia, Netherlands, France and Italy) showed decrease (in average 15.2%, range: 7-31%), and 7 countries (Ireland, Spain, Romania, Poland, Portugal, Iceland and Bulgaria) showed increase (in average 49.1%, range: 3-102%). In the vast majority of the countries, unemployment, alcohol consumption, GDP, and divorce rate did not correlate with changing suicide rates and the only and mostly consistent (negative) correlation has been found between increase in antidepressant-prescription (9-fold increase in Hungary) and declining suicide rates (38% decrease in Hungary. Political / economic changes after 1990 does not seem to have a fundamental role in changing suicide rates in Western and Central Europe.

### CS04.03

Suicides in the countries of the former Soviet Union

V.A. Rozanov. *Odessa National Mechnikov University, Odessa, Ukraine*

Using WHO "Health for all" database we looked at suicide rates in 15 former USSR republics up to latest data. Since A.Värnik and D.Wasserman in the end of 90s have described an effect of anti-alcohol campaign during "perestroika", in the period from 1991-1992 to 1995-1996 there was a sharp rise in suicide rates in the majority of

new independent states. Two main clusters can be distinguished: 1) countries with prevailing ethno-cultural factor (Azerbaijan, Georgia, Armenia, Tajikistan, Turkmenistan, Uzbekistan, partly Republic of Moldova) - general rise was not so marked or did not happen, highest rates were registered in Soviet times and even painful period of transition did not cause higher suicidal activity; 2) countries with prevailing economic factor (Baltic countries, Belarus, Russian Federation, Ukraine, Kazakhstan and Kyrgyzstan) - on the contrary, lowest rates were registered in the Soviet times and maximums were achieved after USSR split. These are mostly industrial countries and dramatic rise in suicides may be attributed to severe economic problems and "shock therapy". Since 1994-1996 and especially after 2001 in these countries a gradual lowering of suicide rates started, which may be attributed to overcoming main economic difficulties. However in the Russian Federation there was a sharp rise in 1999, shortly after default in summer of 1998. Emerging of new independent states on the world map made it possible to see the interplay of economical, social, political and ethno-cultural factors in provoking (or protecting) populations from suicidal behavior in the transition periods.

### CS04.04

Changes in male suicidality in a changing Europe

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In Europe's countries of heavy societal transition, especially male patterns of suicide reflect seismographically the stress load in a country, induced by societal and individual transition.

Suicidality is hereby embedded in stress related morbidity and mortality, mediated by risk taking behaviour and lifestyles, cardiovascular and cerebrovascular morbidity and mortality as well as addictive behaviour and violence.

Male suicide rates are highest in societies where a stressful transition even afflict gender roles that until recently had been traditional. They seem even connected to males shortcomings in their ability to cope with changes regarding their societal status, dignity, self estimation social significance and sense of existential cohesion.

Most male suicides are committed without help seeking and contact with medical or other support systems.

Thus, problems are aggravated by males traditional inability to seek help and be compliant - combined with the incapacity of mental health support structures to provide services that not only are accessible but also acceptable for men.

In addition to this, there are problems of diagnosing males typical "atypical" symptoms of depression and suicidality by traditional depression assessment criteria, leading to both underdiagnosis of male depressive states as well as a consequent male oversuicidality.

### CS04.05

Diminishing alcohol consumption is the most effective suicide preventive program in modern history for males

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Between 1984-88 in USSR male suicide rates decreased by 40% and female by 18%, as compared with 22 European countries where the decrease was 3% and 7% respectively. Decreases in suicide rates occurred

in all republics and for both sexes, but most in the republics where alcohol consumption was high and for men aged 25-54 years. Analyses of the impact of restrictive anti-alcohol policy during perestroika on suicide rates showed that alcohol has a considerable explanatory value for falling suicide rates during this period. The estimated attributable fraction of alcohol in the whole USSR in this period was approximately 50% for male, and 27% for female suicides.

The natural experiment that took place in all 15 republics of the former USSR during perestroika ("restructuring", 1985-90) appears to have been one of the most effective programmes for suicide prevention in modern history.

The results of a case-control study psychological autopsy study performed with relatives of people who committed suicide and with controls confirmed our previous results on the aggregate level and showed that alcohol abuse and dependence (AAD) was diagnosed in 68% of male and 29% of female suicides.

35-59-year old males who committed suicide had the highest risk of alcohol dependence. Among suicide cases only 29% had received life-time diagnoses of alcohol abuse and dependence.

AAD is markedly underdiagnosed by general practitioners and clinicians. In suicide prevention it is important to screen for AAD among patients in both general practices and in psychiatric out- and in patient clinics.

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## S22. Symposium: NATURE AND NARRATIVES OF IMPULSE CONTROL

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### S22.01

The phenomenology of impulse control disorders

C. Mundt. *Psychiatric Clinic, University of Heidelberg, Heidelberg, Germany*

Firstly the descriptive phenomenology of impulse control disorders will briefly be delineated with its focus on the heterogeneity with regard to etiology and psychotherapeutic access.

Secondly the functional findings will be reported which suggest very different categorisations and different psychotherapeutic techniques with the domains of dysfunctions characteristic for addiction, OCD, and impulse control disorder sensu strictu.

The nosological and functional heterogeneity becomes a special difficulty for forensic assessment since psychopathological context, functional underpinnings and societal attitude are very different across the category of impulse control disorders. Categorical and dimensional concepts are intermingled.

Thirdly special aspects of the phenomenological approach will be given eventually with a concluding consideration of what we can make clinically of this heterogenic cluster of disorders and what needs to be clarified by future research.

### S22.02

Loss of impulse control in psychotic disorders

M.L. Figueira. *Department of Psychiatry, St<sup>a</sup> Maria Hospital, Faculty of Medicine of Lisbon, Lisbon, Portugal*

In this presentation we will explore the different psychopathologic presentations and meanings of impulsive behaviour in psychotic patients. A first distinction will be made in schizophrenic patients