S38. Should nosological classification continue to ignore biologic reality and psychopharmacological treatment?

Chairs: M Ackenheil (D), C Höschl (CZ)

S38-1
VALIDITY OF NOSOLOGICAL CLASSIFICATION

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The term "nosological classification" has been used relatively often in the connection with medical classificatory systems. It could be confusing in relation to the term "nosological diagnosis" and its validity. If the medical classification has to be realistic and easy to handle with great reliability, nosological systems can be based not only on established facts, but also on theoretical assumptions regarding the nature of disease.

The appearance in 1980 of DSM-III and later ICD-10 introduced a new epoch in psychiatric classification. Paying less attention to etiologic factors, both systems focused on symptoms and course and created easily recognisable diagnostic criteria for mental disorders. Whereas there was general agreement concerning the high reliability, there was much less confidence in the validity of the diagnosis obtained.

From the scientific point of view we could consider the two nowadays most actual psychiatric classificatory systems DSM-IV and ICD-10 as the theoretical background for the contemporary psychiatric nosology. According to Karl Popper, if any theory had been postulated we should try to demonstrate first of all the theory was false. If it did not survive an attempt at falsification, then it should be replaced by another.

The author tries to demonstrate the validity of the operational DSM-IV and ICD-10-RDC diagnoses of Schizophrenia is low. During the stay in the Mental Health Clinical Research Centre of the University of Iowa Hospitals and Clinics he could take part in the study which demonstrated relatively low level of the validity of the DSM-IV and ICD-10-RDC criterial diagnoses of Schizophrenia.

S38-2
GENETIC RESEARCH IN RELATION TO ICD-10 AND DSM III/IV CLASSIFICATION

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All common psychiatric syndromes are under genetic control with of the genetic basis widely unknown. Various strategies are available for unraveling the genetic basis of these disorders. All these strategies strongly rely on a reliable and valid classifications of the phenotype.

Most promising in this respect are criteria based diagnoses with maximal intrafamilial diagnostic homogeneity and maximal interfamilial diagnostic dissection. Both, DSM-IV and ICD-10 systems propose diagnostic entities which try to fit these requirements. Empirical tests of the validity of the proposed diagnostic boundaries of these disorders and their subtypes are provided by family studies.

We present controlled familiy studies in schizophrenia, affective and anxiety disorders exploring the boundaries of the transmitted phenotypes.

Empirical evidence emerging from the studies suggests for both criteria (intrafamilial homogeneity, intrafamilial dissection) is not convincing neither for schizophrenia nor for affective disorders or anxiety disorders.

S38-3
MODERN NOSOLOGY: HOW DO BIOLOGICAL FINDINGS AND THERAPY FIT?

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The introduction of the standardized diagnostic classification systems DSM IIIR/IV and ICD10 organized by the WHO offered great advantages for research and treatment of psychiatric patients. For the first time a common language in psychiatry, which was comparable world-wide, made it possible to identify psychiatric patients with the same psychiatric disorders. Although both classification systems claim not to identify disease entities they are a sine qua non condition for research, treatment and publications. The major aim was reliability. However, to exclude etiologic aspects was most probably premature and too naive and the major problem, the development of valid diagnoses like in somatic medicine, is unsolved. The recent progress in biological psychiatry is limited by a lack of specificity for diagnostic categories. Genetic studies show that the limit of the transmitted phenotypes in families is not congruent with the limits of diagnostic categories in DSM IIIR/IV and ICD10. Not convincing attempts for solving these problems are the introduction of spectrum disorders and comorbidity. Similarly, the evaluation of biological markers like the neuroendocrine challenge tests, sleep parameters and neurophysiological results show a low specificity as well. Psychopharmacological treatment of patients in ordinary clinical practice is mostly not guided by the diagnostic categories, but oriented to target symptoms which occur in different nosological categories. Treatment response and non-response are hints for different causes of the disorders and can lead to additional criteria. In order to overcome these discrepancies, psychopathology must consider these biological findings for identifying better and more valid diagnostic categories in the future.

S38-4
CLASSIFICATORY OBSTACLES IN BIOLOGICAL PSYCHIATRY AND PSYCHOPHARMACOLOGY

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Nosological classification in psychiatry, in the way it is presently applied, does not facilitate biological and psychopharmacological research. Some of the reasons why will be discussed.

1. Syndromal acuity has disappeared. Consequently it is impossible to determine: a) weather a particular drug affects a particular symptom configuration, b) what exactly the behavioral correlate is of a particular disturbance.
2. The border between distress and disorder is ill-defined.
3. Syptom configuration and certain non-symptomatological variables such as duration and severity are prematurely linked, as to conceptualize categorical entities. The validity of those constructs has not been sufficiently demonstrated. This undermines the validity of biological studies and leads to "nosologomania", i.e. an ever growing series of undervalidated psychiatric "disorders".
4. The nosological disease model is unconditionally and uncritically accepted. Alternative models are ignored; particularly the

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reaction form model, though it has substantial heuristic value, and merits to be thoroughly scrutinized.

(1) Van Praag HM (1997): Over the mainstream: diagnostic requirements for biological psychiatric research. Psychiat Res 72: 201–212.
(2) Van Praag HM (1998): Inflationary tendencies in judging the yield of depression research. Neuropsychobiology. In press.

S39. Affective disorders in the puerperium and the premenstruum: biological mechanisms and treatment

Chairs: A Wieck (UK), G Koren (CDN)

S39-1

AFFECTIVE DISORDERS IN THE POSTNATAL PERIOD AND THE PREMENSTRUUM: BIOLOGICAL MECHANISMS

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Reproductive events are known to trigger an increase of affective disorders in women. In the early postnatal period mild mood swings, depressive episodes and affective psychoses are all more likely to occur and in the premenstruum some women experience changes in mood and behaviour which can be significant enough to interfere with day to day functioning. Because both time points are associated with a marked and rapid decline in circulating female sex steroids it has been suggested that the rapid hormone 'withdrawal' triggers affective disorders in predisposed women by its effect on neurotransmitter systems.

There are only few randomized controlled treatment studies of the effects of ovarian hormones on mood and none have been conducted to test the withdrawal hypothesis. However, studies in animals and neuroendocrine investigations in women have strongly supported a role of ovarian hormones in the pathogenesis of affective disorders. Sex steroids have free access to the brain where they bind to widespread receptors. Intracellular ovarian hormone receptors are present within the serotonergic raphe nuclei and treatment with ovarian hormones has been reported to modulate 5HT activity by altering for example serotonin turnover, monoamine oxidase activity, 5HT2-receptor mRNA levels and the binding characteristics of some 5HT receptors. In women, an increasing number of studies suggest that oestradiol and/or progesterone increase serotonergic neurotransmission in a way which is consistent with an antidepressant effect. In the dopaminergic systems actions of oestrogen and progesterone can be stimulatory or inhibitory depending on the site, the dose and the duration of hormone administration. Preliminary neuroendocrine studies suggest that women predisposed to postnatal manic-depressive illness have increased hypothalamic D2 receptor sensitivity when ovarian hormone production is high.

S39-2

A CONTROLLED STUDY OF FLUOXETINE AND COGNITIVE-BEHAVIOURAL COUNSELLING IN THE TREATMENT OF POSTNATAL DEPRESSION

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Objective: To study the effectiveness of fluoxetine and cognitive-behavioural counselling (CBC) in depressive illness in postnatal women: to compare fluoxetine v. placebo, six sessions v. one session of counselling, and combinations of drugs and counselling.

Design: A randomised, controlled treatment trial, double blind in relation to drug treatment, with four treatment cells: fluoxetine or placebo plus one or six sessions of counselling.

Subjects: 87 women satisfying criteria for depressive illness 6–8 weeks after childbirth, 61 (70%) of whom completed 12 weeks of treatment.

Setting: Community-based study in south Manchester.

Main Outcome Measures: Psychiatric morbidity after 1, 4 and 12 weeks, measured as mean scores and 95% confidence limits on the Revised Clinical Interview Schedule, the Edinburgh Postnatal Depression Scale and the Hamilton Depression Scale.

Results: Highly significant improvement was observed in all four treatment groups. The improvement in subjects receiving fluoxetine was significantly greater than in those receiving placebo. The improvement after 6 sessions of counselling was significantly greater than after a single session. Interaction between counselling and fluoxetine was not statistically significant. These differences were evident after one week, and improvement in all groups was complete after four weeks.

Conclusions: Both fluoxetine and cognitive behavioural counselling given as a course of therapy are effective treatments for non-psychotic depression in postnatal women. Following an initial session of counselling, additional benefit results from either fluoxetine or further counselling but there appears to be no advantage in receiving both. The choice of treatment may therefore be made by postnatal women themselves, who are often reluctant to take medication. The study has led to a training programme in CBC for health visitors in Manchester, and preliminary results from the evaluation of training will also be presented.

S39-3

NEURODEVELOPMENT OF CHILDREN EXPOSED IN UTERO TO ANTIDEPRESSANT DRUGS

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Background: Many women of reproductive age have depression, necessitating therapy with either a tricyclic antidepressant drug or a drug, such as fluoxetine, that inhibits the reuptake of serotonin. Whether these drugs affect fetal neurodevelopment is not known.

Methods: We studied the children of 80 mothers who had received a tricyclic antipdepressant drug during pregnancy, 55 children whose mothers had received fluoxetine during pregnancy, and 84 children whose mothers had not been exposed during pregnancy to any agent known to affect the fetus adversely. The children's global IQ and language development were assessed between 16 and 86 months of postnatal age by age-appropriate Bayley Scales of Infant Development or the McCarthy Scales of Children's Abilities (for IQ) and the Reynell Developmental Language Scales.

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