

with measurable decreases in catecholamine activity and BDNF occurring in animals lacking control. This may be a model of the effect of control in inducing human depression.

### S02.3

Helplessness and stress related conditions in societies and populations of transition

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In the transitional countries of eastern Europe and even in populations involved in societal change in western European countries, there have been dramatic increases in unemployment, loss of social protection, identity loss and hopelessness, stress-related premature mortality and excessive morbidity. Male mortality especially, seems here to be a seismographic indicator for the stress load in societies. In trying to identify not only curative but also protective factors, there should be focus on the special resilience and resistance of women in times of societal stress.

In this contribution, morbidity and mortality data from European populations at risk during the 90s will be shown. Implications for mental health promotion, mental disease prevention and the necessary awareness of the impact of political decisions and policy changes on the mental health of a population will be discussed.

### S02.4

Loss of control and cardiovascular morbidity

M. Kopp. *Germany*

No abstract was available at the time of printing.

### S02.5

Depression and cardiovascular morbidity

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Depression is a stress-related condition that has been shown in epidemiological studies to precede heart disease and to be associated with a negative outcome in patients with myocardial infarction. At this time, the pathophysiological link between both conditions is not completely understood. First, depression is related to untoward health behaviors, like smoking, non-compliance to medication and unhealthy diet. Second, depression is strongly related to an activation of stress systems. The presence of hypercortisolemia in depressed patients has been shown to be associated with increased visceral fat, the core symptom of the Metabolic Syndrome. The increased sympathoadrenergic tone of depressed patients may lead to reduced heart rate variability and a predisposition to arrhythmic events. Also, depressed patients' platelets have been shown to be activated, which may further contribute to an increased cardiovascular risk. There is considerable evidence for the assumption that treating depression may improve the cardiovascular prognosis, especially after myocardial infarction.

## S03. Assessment of outcome in routine clinical practice

*Chairs: M. Ruggeri (I), G. Thornicroft (GB)*

### S03.1

Feasibility and usefulness of routine outcome assessment: the South-Verona Outcome Project

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The South-Verona Outcome Project (SVOP) is a naturalistic study assessing the outcome of care in the Community-based Mental Health Service of South-Verona. Assessments are entirely conducted in the frame of routine clinical practice and take place twice a year for both new patients and those already in contact. In wave A (April-June) global functioning, psychopathology, disability, and needs for care are assessed by the key-professional at the first patient's contact in the period. In wave B (October-December) the assessment is made both by the key-professionals (the same assessments as in wave A) and the patients; the latter have to assess their quality of life and service's satisfaction. The SVOP constitutes one of the largest databases obtained in a real world service, with about 2500 patients assessed by clinicians and more than 1000 self-assessments made by the patients in four years. Results of periodical checks on the quality of data (inter-rater and test retest-reliability exercises, representativeness of the sample, amount of missing data) will be shown, as well as results of some studies on predictors of favourable or negative outcome.

### S03.2

A comparison of needs assessed by staff and by an epidemiologically representative sample of patients with psychosis

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Staff and severely mentally ill patients differ in the assessments of need. This study compares staff and patient assessments of need for people suffering from psychotic disorders. The needs of an epidemiologically representative sample of 137 patients from a catchment area psychiatric service in South London who had an ICD-10 diagnosis of a functional psychotic disorder were assessed cross-sectionally by patients and staff, using the Camberwell Assessment of Need. Staff rated patients having on average 6.1 needs, and patients rated 6.7 needs ( $t=2.58$ ,  $df=136$ ,  $P=0.011$ ). This difference was accounted for the staff rating of 1.2 unmet needs and the patient rating of 1.8 unmet needs ( $t=3.58$ ,  $df=136$ ,  $P<0.001$ ). There was no difference in rating of total number of met needs. There was no difference in ratings in relation to any patient sociodemographic characteristics. There was moderate or better agreement on the presence of a need for 13 of the 22 domains in the Camberwell Assessment of Need. Staff and patients moderately agree about met needs, but agree less often on unmet needs.

### S03.3

Issues in the routine measurement of quality of life outcome

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The concept of quality of life has grown in use in assessment and in outcome measurement and to a lesser extent as a basis for

specific QoL-based interventions. The research literature reflects this growth in interest, from the earliest paper in 1931 to the present. Medline entries now stand at 34,624, and for all the major data bases, at 82,849 (including overlap). By comparison, routine QoL measurement is a recent and much less researched phenomenon. The issues in the routine measurement of QoL are not dissimilar to those for any assessment tool, such as reliability, validity, ease of use etc, but there are specific issues such as the nature of the concept being used, the capacity to demonstrate change over time, and responseshift, that also need to be addressed before routine measurement can be implemented. Data will be presented that relate to these specific issues. Consideration will also be given to the UK government's current attempts to introduce a standard set of outcome indicators, including QoL, for routine use in the National Mental Health Service.

### S03.4

Impact of regular outcome assessment on treatment – the MECCA Study

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There are wide spread calls for implementing regular outcome assessment in routine care. Clinicians and patients are more likely to comply with the requirements of regular outcome assessment, if there is a direct positive impact on individual treatment which needs to be demonstrated in research. The MECCA-Study is a randomised, controlled trial conducted in community mental health care services in six European countries. The Study investigates how the regular assessment and feedback of outcome indicators impact on treatment process and treatment outcome in community care of patients with psychotic disorders. Regularly assessed outcome criteria are simple indicators of subjective quality of life, treatment satisfaction and patients' wishes for different and/or additional interventions. We expect a more favourable outcome after one year in the experimental group as compared to standard care and hypothesize that the difference will be mediated through more accurate treatment decisions or a more positive therapeutic relationship or both. The focus on subjective outcome criteria is supposed to shift the communication between key worker and patient towards patients' views and to strengthen a partnership model of care. Concept, methods and organisational approach of the MECCA Study will be presented. This includes how the feedback process is implemented and practiced using simple technology and a special software programme.

### S03.5

Estimating treatment effects from trials and observational studies

G. Dunn\*. *University of Manchester, School of Epidemiology & Health Sciences, UK*

The theme is the estimation of the causal effects of treatment. It is based on Rubin's counterfactual model of causality. Basically, in estimating a causal effect, we are trying to compare outcome of the treatment actually received with that which would have been observed if, contrary to fact, the patient had received either no treatment or, alternatively, another form of treatment. The

arguments will be illustrated using data from a randomized clinical trial in which there are no protocol violations (everyone provides outcome data and fully complies with the allocated treatment). Next, we look at the impact of non-compliance and dropouts in a randomized clinical trial. Finally, we look at the problems of inferring causality from unstructured, routinely collected, outcome data. One possibility is to use so-called propensity models.

## S04. In vivo imaging of neurotransmitter mechanisms. Methods and clinical application

*Chairs: A.-L. Nordström (S), P. Grasby (GB)*

### S04.1

PET and SPECT in psychiatry

A. Catafau. *Spain*

No abstract was available at the time of printing.

### S04.2

PET studies of depression

P. Grasby. *UK*

No abstract was available at the time of printing.

### S04.3

Dopamine synthesis rate in prefrontal cortex in schizophrenia by use of PET

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**Objectives:** To investigate the dopamine-synthesis in the brain of drug-free schizophrenic patients in the prefrontal cortex by use of <sup>11</sup>C-l-DOPA as the tracer and PET.

**Methods:** PET was performed in 12 drug-free (10 drug-naive) schizophrenic patients and in 10 healthy volunteers matched for age and gender. The time-radioactive curve from occipital cortex was used as reference area and K<sub>i</sub> images in different brain areas were adapted to a brain atlas. A significant overall increase of the K<sub>i</sub> value was found in the schizophrenic group.

**Results:** Significantly higher K<sub>i</sub> values were found in the schizophrenic patients compared to the controls in the caudate nucleus, putamen and medial prefrontal cortex (Brodmann 24), with the greatest difference in the prefrontal cortex. The K<sub>i</sub> values reflect and increased utilization of l-DOPA, presumably due to increased activity of the amino acid decarboxylase enzyme.

**Conclusions:** Our results give support for an abnormal dopamine synthesis/activity in the prefrontal cortex in patients with schizophrenia.

### S04.4

PET and antipsychotic drugs – background

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Important clinical applications of positron emission tomography (PET) include studies of mechanisms underlying clinical drugs