

the ACT/Madison-model, including case management, psychoeducation, social skills training, crisis homes, employment demands and treatment plan.

**Method:** The baseline evaluation contained register data obtained prior to the start of the clinical study. Data included 11,016 admissions to mental hospitals/wards during 1981–2000 from the intervention/control region (Tønder/Aabenraa) and 868,631 admissions from all Denmark together with out-patient data during the period 1995–2000. Linear regression, analysis of variance and models of prediction were performed.

**Results:** The bed rate in the SJ-county (76/100,000 December 31, 2000) were halved during the period, corresponding to all Denmark. The increase in admission rate and decrease in bed days per admission showed homogenous pattern between intervention and control region. The country had a much higher admission rate and use of beds. The rate of involuntary admissions (0.4/1,000/year) and the hospital incidence of schizophrenia (1.5/10,000/year) were at the same level in the intervention/control region and the country. The point prevalence and referral rates of out-patients increased to around 6/1,000 and 7/1,000/year, respectively in both regions. One quarter of these patients belonged to the ICD-10 diagnosis F20 or F30/31.

**Conclusion:** The regions of intervention and control had prior to start of ACT the same pattern of use of psychiatric services, enabling an evaluation of the effects of ACT.

#### P10.02

Experience from the first ACT-programme in Denmark. II. Severe mental illness. A register diagnosis

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**Objective:** During the last 25 years the Danish psychiatric services have changed to mainly short term admissions and out patient treatments at CMH-centres. The community psychiatry in Denmark has been criticized because of drop-outs of patients with severe mental illness and because patients suffering from schizophrenia have doubled the SMR of suicide and tripled the rate of conviction to treatment. In an attempt to deal with those probands several ACT projects will be established in Denmark during the next 1–2 years. The first of these started in the Tønder region on May 1st, 2001.

**Method:** Severe mental illness was defined from register data on the basis of psychosis (main diagnosis: F20, F22, F25, F31) and high use of psychiatric services (at least: 4 admissions, or 50 bed days, or 50 hospital days, during preceding two years). Data concerning drop out (inactive during a period), death and immigration were obtained. Logistic regression and likelihood ratio analyses were performed.

**Results:** The point prevalence rate of severe mental illness on December 31, 2000 in the SJ-county was 1.31/1,000. The rate of inactive patients was 0.28/1,000. The rates were distributed inhomogeneously in the 5 regions in the SJ-county. The Tønder (intervention) and Aabenraa (control) regions had low prevalence rates (1.04/1,000 and 1.06/1,000, respectively) ( $p < 0.01$ ). In a four-year cohort half of the patients dropped out at least once, and barely half of these started again. The probability for gaining status as inactive increased with time ( $p=0.09$ ). Tønder and Aabenraa regions had homogeneous patterns ( $p=0.22$ ). About 60% of patients identified in the register as suffering from severe mental illness in the region, were attached to the CMH-centres in Tønder or Aabenraa. These patients constituted about 10% of all patient attached to the centres.

**Conclusion:** The register diagnosis "Severe mental illness" is a target group for ACT, whose rates and follow-up patterns are illuminated. The patient can be identified through the register and the register diagnosis and the status active/inactive might be used as an unbiased effect parameter in evaluation of the ACT.

#### P10.03

Experience from the first ACT-programme in Denmark. III. The first 60 patients

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**Objective:** On May 1, 2001 we started an ACT-programme in the Tønder region. The principle of evaluation is within a quasi-experimental design (intervention/control) to obtain register data (time trend, severe mental illness) and clinical data (symptoms, function, satisfaction, quality of treatment) as description and as test of priority hypotheses. These included: 1. Better adherence to treatment. 2. Improvement in psychopathology. 3. Improvement in social function. 4. Reduction in abuses. 5. Greater satisfaction reported by patients and their relatives. 6. Better quality in treatment. 7. Fewer and shorter admissions to mental hospitals.

**Method:** The target group of ACT is defined by a main diagnosis (F20, F22, F25, F31) and at least one of the following items: 1. abuses or conviction to treatment. 2. Instability. 3. High use of hospital benefits. The control group is from the CMH-centre in Aabenraa. The group consist of all prevalent cases and all referred cases during the following year with main diagnosis as in the target group. A pair matching on main diagnosis, instability, and GAF level, create the control group. The data obtained from cases and controls are register data, GAF, DIPSY, and CSQ. Further, the patients are interviewed with UKU, Cansas, Sans, Saps, and PSQ. Data is obtained at start and after 12 and 24 months.

**Results:** During the first 7 months of the study 55 patients have started in the ACT-programme. Identification of patients were through register data and through internal referrals from the counties' psychiatric services. The latter counts for half of the patients. Five of the patients were first line schizophrenic, the rest of the patients were chronic psychotic and all belonged to the target group. The data is not yet evaluated.

**Conclusion:** Testing the hypotheses demand at least a 2 years follow-up of at least 100 cases. Similar projects are in progress at other places in Denmark, thus metaanalysis might be a possibility.

#### P10.04

Psychiatric service by eyes of the consumers

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The research of the psychiatric service consumers, which were treated in a psychiatric hospital, daytime hospital, attending a psychoneurological hospital was carried out. During research 276 men were interrogated. The patients receiving the aid in psychiatric institutions basically are satisfied with it (157 respondents or 56,9 percents were completely satisfied with the rendered aid and 95 or 36,8 % – partially). Data did not depend on a type of medical. From the positive moments of treatment the patients completely satisfied with the psychiatric aid first of all specified quality of spent treatment. From the negative moments of treatment the patients irrespective of a type of medical establishment marked presence of a restrictive regimen and bad attitude relation on the part of the

medical. But they accept a dispensary observation. They think that the basic reason of existing disadvantages in psychiatric service is the current social and economic conditions in our country. There was a greatest percent of the respondents among the patients completely unsatisfied with a medical care who have specified that they were hospitalized without their consent (38 percents).

### P10.05

Mental health service systems in 5 Eastern and Western European regions

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**Objective:** Within the evaluation of day hospital treatment in a multi-centre EC-funded research project (EDEN-study) it is of great relevance to describe the components of the whole regional mental health service systems of the study centres' catchment areas. Participating centres are located in East Germany (Dresden), UK (London), Southern Poland (Wrocław), East-Slovakia (Michalovce) and Czech Republic (Prague). The varying stage of reforming mental health care increases the need to analyse differences in these service systems.

**Method:** The European Service Mapping Schedule (ESMS) was used to classify the full range of services identified within each of the catchment areas (100.000–650.000 residents).

**Results:** The ESMS revealed large differences in service availability and utilization. E.g. concerning acute residential services there is a range of 76,6 (Wrocław) – 679,4 places/100.000 residents (Dresden), for non-acute residential services the results differ between 42, (Dresden) – 125,7 places (Wrocław); the number of service users of non-acute day & structured activity services varies from 345 (Prague) – 768,2/100.000 residents (Dresden).

**Conclusion:** Reflections of the developmental stage of the regional service system on conceptualisation of day hospitals are discussed.

### P10.06

Structural and procedural characteristics of psychiatric day hospitals in Eastern and Western European countries

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**Objectives:** Within the last decades, partial hospitalisation has been a key element of most modern psychiatric services. However, the concept of partial hospitalisation has always been subjected to great changes. As regards the current situation in the Eastern European countries, the reorganisation of the mental health care system is still ongoing, and the establishment of day hospitals is an important part of this process. As regards the current situation in the Western European countries, especially the aim of lowering the costs of treatment is leading to rethinking the main function of day hospitals and to establishing day hospitals acting as an alternative to inpatient treatment for patients with acute disorders. In respect of

this background, the presentation describes and compares structural and procedural characteristics of psychiatric day hospitals in the Czech Republic, Germany, Poland, the Slovak Republic, and the UK.

**Methods:** Data will have been assessed in 2001 and 2002 by a postal survey using a self-developed 15-item questionnaire.

**Conclusion:** Results will be discussed and future steps concerning the development of partial hospitalisation will be derived from.

## P11. Depressive disorders

### P11.01

Immune-receptor-endocrine interactions in the pathophysiology of major depression

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The role of the Adrenergic and Benzodiazepine receptors in development of immunosuppression on leukocyte-pyruvate dehydrogenase activity was studied in 60 patients with primary major depressive episode. Investigation included administration of  $\alpha$ -adrenergic "receptor" drug L-DOPA and benzodiazepine "receptor" drug-DIASEPAM before dexamethazone immunosuppression test (DIST). In cases of primary major depressive episode in separation with an anxiety disorder (30 patients – comparison subjects) after L-DOPA and Diasepam administration activity of leukocyte-pyruvate dehydrogenase increased more than 25 %. DIASEPAM of a long dose had a higher immunosuppressive effect than L-DOPA (0,5 g) on alteration of leukocyte-pyruvate dehydrogenase effect than L-DOPA (0,5 g) on alteration of leukocyte-pyruvate dehydrogenase activity (more than 5 mmol/l/hour,  $p < 0,05$ ). DIASEPAM immunosuppressive action did not correlate with positive dynamics of T-and-B-cells lymphocytes. From other side, mechanism of L-DOPA action on adrenergic receptors stimulated T-cell receptors and made them hyperactive (produced increasing range of T-cell lymphocytes). It means that adrenergic and benzodiazepine receptors are interacting with each other and influencing T-and-B-cells receptors in different ways during immunosuppression. Finally, it is important to study immune-receptor-endocrine interactions and major depression.

### P11.02

The role of depression in early psychological rehabilitation in patients with CHD

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**Aim of study:** The assessment; the influence of intensity of depression in patients after coronary by-pass surgery on the course of primary cardiac rehabilitation (hospital phase) and relation between depression and self-ego picture (particularly as an intensity of psychical needs chosen by patients).

**Material and methods:** 30 men (age between 45–62,  $x = 50,3$ ) after coronary disease operation (first class NYHA) In study were used: Beck's Scale of Depression; Adjective Check List – H.G.Gough, A.B.Heilbrun; Patients were examined twice (in the beginning and end of two weeks early cardiac hospital rehabilitation)

**Results:** During first days of cardiac rehabilitation 46% patients appeared depressive reactions (manifested low or medium intensity of them). After hospital phase was observed percentage depressed