

Symposia

Saturday, April 17, 2004

S23. Symposium: Progress in the Genetics of Psychiatric Disorders

Chairpersons: Wolfgang Maier (Bonn, Germany),
Henrik Ewald (Risskov, Denmark)
08:30 – 10:00, Hall A

S23.01

New susceptibility and candidate genes for schizophrenia

W. Maier^{1,*}, P. Falkai², M. Rietschel³, S.G. Schwab¹, D.B. Wildenauer¹. ¹Department of Psychiatry, University of Bonn. ²Department of Psychiatry, Saar-University, Homburg. ³Division of Genetic Epidemiology in Psychiatry, Central Institute of Mental Health, Mannheim, Germany

The first disposition genes for schizophrenia were identified and replicated in 2002 and 2003: dysbindin, G72, neuregulin1. These major break-throughs became possible after genome-wide linkage analyses delineated candidate regions (among them intervals on chromosome 6p, 13q, 8p) which were likely to cover disposition genes. Linkage disequilibrium mapping in these regions was able to identify these three genes. Further candidate regions affirmed in recent meta-analyses, are under intensive study in order to identify additional disposition genes. Although disposition genes are identified, the search for pathogenic mutants is more difficult than expected. Up to now, only associations between haplotypes in these genes and the disorder are replicated, but the pathogenic mutant is not identified for any disposition gene. Yet, genotype-phenotype relationships can also be explored for at-risk haplotypes in disposition genes. We report the first associations between at-risk haplotypes and brain changes in schizophrenia (i.e., volume of the hippocampus).

S23.02

Progress in pharmacogenetic and pharmacogenomic investigation of antipsychotic response

R.W. Kerwin*, J. Munro, M.J. Arranz. *Clinical Neuropharmacology, Division of P. Medicine, Institute of Psychiatry, London, UK*

Response variability to antipsychotic treatment is a complex trait influenced both by environmental and genetic factors. Pharmacogenetic and pharmacogenomic research focus on determining the genetic contribution to response variability. Pharmacogenetic research, using a candidate gene approach, has produced a set on interesting findings relating genetic mutations with response variability. Perhaps the most interesting of these are the associations reported between

dopaminergic and metabolic polymorphisms and drug-induced movement disorders. Several studies have also related mutations in individual genes and clinical outcome: dopamine and serotonin receptor variants have been related to general response to antipsychotic treatment. Individual findings are of limited clinical value, although a combination of information in key genes may result in prediction of response. We have shown the feasibility of this approach by developing tests for the antipsychotics clozapine, risperidone and olanzapine with a response prediction level superior to 76%. Further development of these techniques, with the inclusion of information relevant to a wide range of antipsychotics, will facilitate the selection of treatment based on the patients' pharmacogenetic predisposition. Pharmacogenomic research involving the simultaneous investigation of large number of genes and samples is expected to increase the pace of discovery of genetic determinants of response variability. Pharmacogenomic studies of alterations in gene expression induced by antipsychotics will identify novel targets and highlight receptors of therapeutic value, resulting in improved psychotropic drugs. Current applications of pharmacogenomics include large scale genotyping of metabolic deficiencies in clinical trials to select patient subpopulations likely to benefit from treatment without side-effects.

S23.03

New susceptibility and candidate genes for affective disorders

H. Ewald*. *Institute for Basic Psychiatric Research, Psychiatric Hospital in Aarhus, Risskov, Denmark*

Abstract not received.

S23.04

Genetic research and testing in the public

M. Rietschel^{1,*}, C. Rietz², G. Rudinger², W. Maier³, F. Illes¹. ¹Division Genetic Epidemiology in Psychiatry, Central Institute of Mental Health, Mannheim. ²Institute of Psychology. ³Department of Psychiatry, University of Bonn, Germany

Knowledge of predisposition genes for psychiatric illnesses will hopefully broaden the understanding of the pathophysiology of the disorders and lead to prophylaxis and causal therapy. The discovery of vulnerability genes may also allow for predictive testing in persons at risk as well as in the general population. But due to the fact, that most neuropsychiatric illnesses are complex disorders, the identification of vulnerability genes will neither allow to predict the course of the disorder nor to foresee if the tested individual will develop the disease at all. Therefore the knowledge of vulnerability genes will only help to modify the a-priori risk of an individual. As this may implicate new ethical challenges and may raise unforeseen problems, it is extremely interesting and important to be aware of the attitudes of the public

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towards this issue. A representative sample of the German general population was interviewed about hopes and fears towards psychiatric genetic research and its possible application (e.g. predictive testing). The majority (80%) of the general population is in favor of psychiatric genetic research, simultaneously however, more than 50% express moral doubts. A substantial part of the probands expressed interest in prenatal testing (37%) and predictive genetic testing for themselves (45%) or for children (35%). While the development of new drugs is approved as a benefit, the possible interest of health insurance companies is seen as disadvantage by the majority. To avoid problems in future consultations, experts have to learn about the approval and objection of the public.

S23.05

Genetic predictors of antidepressants efficacy: The State of the Art
A. Serretti*, C. Lorenzi, F. Benedetti, A. Pirovano, R. Zanardi, C. Colombo, C. Ploia, V. Tubazio, E. Smeraldi. *Department of Psychiatry, Vita-Salute University, San Raffaele Institute, Milan Italy*

Pharmacogenetic studies in mood disorder were performed only during recent years involving short term antidepressant response. Antidepressant drugs are the first line treatment for major depression but the therapeutic response in clinical practice is expected in about two thirds of patients. The large inter-individual variability in the pharmacological response pattern has been partially ascribed to heritable factors. We investigated the possible influence of a set of candidate genes as possible genetic predictors of antidepressant response efficacy. The functional polymorphism in the upstream regulatory region of the serotonin transporter gene (5-HTTLPR), the A218C gene variant on the tryptophan hydroxylase gene (TPH), the G-protein beta3-subunit (Gbeta3) C825T gene variant and the Circadian Locomotor Output Cycles Kaput (CLOCK) gene variants were independently associated with short term SSRIs antidepressant efficacy. The effects of 5-HTTLPR and TPH polymorphisms were more pronounced in subjects not taking pindolol, while this effect was not observed for Gbeta3 and CLOCK. CLOCK variants were associated with insomnia time course during treatment. We observed a significantly higher presence of insomnia throughout the trial in homozygotes for the C variant. The inclusion in the model of baseline depressive scores, polarity, presence of psychotic features and fluvoxamine plasma levels did not influence the observed association. DRD2, DRD4, Mao-A and 5-HT2A gene variants were not associated with outcome. If confirmed, these results may shed light on the genetically determined component of the response to pharmacological treatments, thus helping the clinician to individualize each patient's therapy according to their genetic pattern.

S69. Symposium: The Endogenous Cannabinoid System in Schizophrenia

Chairpersons: F. Markus Leweke (Cologne, Germany), Joachim Klosterkötter (Cologne, Germany)
08:30 – 10:00, Hall B

S69.01

Changes in Cannabis 1 receptors in postmortem CNS from subjects with schizophrenia

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To determine whether changes in the cannabinoid system were present in the brains of subjects with schizophrenia, we measured the binding of [3H]CP-55940 to the cannabinoid1 receptor in the Brodmann's area (BA) 9, caudate-putamen and areas of the temporal lobe from schizophrenic and control subjects, some of whom had ingested cannabis close to death. The density of [3H]CP-55940 binding to CB1 receptors was increased in BA 9 from subjects with schizophrenia (mean +/- SEM: 142 ± 9.9 vs. 119 +/- 6.6 fmol / mg ETE; p<0.05), independent of recent cannabis ingestion. Binding density was also increased in the caudate-putamen from subjects who had recently ingested cannabis (151 +/- 9.0 vs. 123 +/- 7.2 fmol / mg ETE; p<0.05), independent of diagnoses. As subjects with schizophrenia had been treated with typical antipsychotic drugs, we measure [3H]CP-55940 in tissue from rats treated with haloperidol and showed treatment for one month did not change levels of radioligand binding in any CNS regions studied, including the cortex and striatum. Thus our data suggest that there are changes in cannabinoid1 receptors in BA 9 that may prove to be associated with the pathology of the illness.

S69.02

Endocannabinoids in schizophrenia - do they play a role?

F.M. Leweke^{1,*}, A. Giuffrida², D. Koethe¹, D. Schreiber^{1,3}, C.W. Gerth¹, C. Mauss¹, M.A. Neatby¹, B.M. Nolden¹, J. Faulhaber¹, D. Piomelli³, J. Klosterkötter¹. ¹*Department of Psychiatry and Psychotherapy, University of Cologne, Germany.* ²*Department of Pharmacology, University of Texas, San Antonio, TX.* ³*Department of Pharmacology, University of California, Irvine, CA, USA*

Activation of cannabinoid CB1 receptors by psychotropic cannabinoids produces psychotic or near-psychosis responses, suggesting that dysfunction in the endocannabinoid system may contribute to the pathogenesis of psychotic disorders. Therefore, we have examined the role of endocannabinoid signaling in acute schizophrenia by measuring levels of the endocannabinoid anandamide in cerebrospinal fluid (CSF) and serum of various groups of healthy volunteers (n=84) and patients suffering from acute psychiatric disorders (n=187). The level of anandamide in CSF is significantly elevated in acute, antipsychotic-naïve, first-episode schizophrenic patients (n=47) when compared to controls. This is reversed by the administration of antipsychotics, which antagonize dopamine D2-like receptors (n=37), but not by those, which preferentially antagonize 5HT2A receptors (n=34). Furthermore, we found that, in antipsychotic-naïve, acute schizophrenics, CSF anandamide is negatively correlated with psychotic symptoms. Our findings were specific for schizophrenia spectrum disorders. Our results suggest that anandamide elevation in schizophrenia may reflect a compensatory adaptation to dopaminergic hyperactivity revealing an unexpected protective role for this endocannabinoid lipid in psychotic states.

S69.03

Vulnerability to cannabis and schizophrenia: Are we all equal?

M. Krebs^{1,2,*}, S. Leroy¹, C. Goldberger^{1,2}, D. Gourion^{1,2}, M.C. Bourdel¹, P. Gorwood³, M.F. Poirier^{1,2}. ¹*E0117-Inserm Paris 5, Hôpital Sainte-Anne, Paris.* ²*SHU, Hôpital Sainte-Anne, Paris.* ³*CHU Louis Mourier, Colombes, France*

Recent epidemiological studies brought considerable support to the view that cannabis, frequently taken during the period of diseases onset, could precipitates schizophrenia in vulnerable subjects. Cannabis is also well known to worsen psychotic symptoms in the schizophrenic patients and to produce perceptual distortions in some, but not all, healthy subjects. We analyzed whether these psychotomimetic effects of cannabis could be related to individual genetic variation. The main active compound in cannabis, the tetrahydrocannabinol (THC), acts on the cannabinoid receptor type 1 (CNR1). We analyzed the 5 (AAT)_n repeat polymorphism of the CNR1 gene in a French Caucasian population. While there was no difference between schizophrenic patients as a whole (n=213) and healthy controls (n=102), among schizophrenic patients previously exposed to cannabis, Cannabis Sensitive Schizophrenic patients (CSS) differed significantly from non-CSS in the allele distribution (CLUMP T1 p = 0.027). There was a significant lack of allele 8 (CLUMP T3 p value = 0.002). In addition, male CSS patients also differ from the male opiate dependent patients (n=85), all at least abusers of cannabis but in whom schizophrenia had been excluded (p value = 0.007). These results suggest that the 5 (ATT)_n variants of the CB1 gene could influence the individual response to cannabis and in particular the risk of precipitating schizophrenia when exposed to cannabis.

S69.04

The endocannabinoid system as a target for psychopharmacotherapy in schizophrenia

C.W. Gerth*, D. Koethe, C. Mauss, D. Schreiber, A. Jülicher, A. Haensel, B.M. Nolden, J. Klosterkötter, F.M. Leweke. *Department of Psychiatry and Psychotherapy, University of Cologne, Germany*

The endogenous cannabinoid system has been shown of particular importance in acute schizophrenia. It interacts with various neurotransmitter systems in the central nervous system including the dopaminergic, glutamatergic and GABAergic system. While the psychedelic properties of the natural cannabis compound delta-9-tetrahydrocannabinol is widely known, there is some experimental and clinical evidence that other herbal cannabinoid compounds may have antipsychotic properties. Based on these confounders, we designed a double-blind, controlled clinical trial on the effects of purified cannabidiol, a major compound of herbal cannabis, in acute schizophrenia compared to the antipsychotic amisulprid. The antipsychotic properties of both drugs were the primary target of the study. Furthermore, side-effects and anxiolytic capabilities of both treatment strategies are investigated. A detailed study design and first results will be presented and discussed with a particular focus on the underlying pharmacological mechanisms. We gratefully acknowledge the support of the Stanley Medical Research Institute (00-093 to FML) and the Koeln Fortune Program (107/2000 + 101/2001 to FML).

S54. Symposium: Psychotic Disorders in Children

Chairpersons: Helmut Remschmidt (Marburg, Germany), Alan Apter (Petach Tikva, Israel)
08:30 – 10:00, Hall C

S54.01

Neurobiological and clinical aspects of early-onset schizophrenia

H. Remschmidt*. *Department of Child and Adolescent Psychiatry and Psychotherapy, Philipps-University, Marburg, Germany*

Objectives: To evaluate neuropsychological factors, symptoms, course and long-term outcome in patients with early-onset schizophrenia.

Methods: (1) Review of the literature with regard to clinical features, neurobiological and neuropsychological findings in childhood and adolescent onset schizophrenia. (2) Review of the results of two studies of the authors on precursors, clinical symptoms, course and long-term follow-up in two independent samples of patients with early-onset schizophrenia. Methods used were a standardized symptom list, the Instrument for the Retrospective Assessment of the Onset of Schizophrenia (IRAOS) and the Scales for the Assessment of Positive and Negative Symptoms (SAPS and SANS) as well as the Brief Psychiatric Rating Scale (BPRS).

Results: (1) Developmental events and precursors of schizophrenia cover a wide range of dysfunctions and disturbances, including elevated rates of soft neurological signs, birth complications, slow habituation and high-baseline autonomic activity, a high rate of developmental disorders and overall and specific cognitive deficits. (2) Positive and negative symptoms can be retrospectively identified months or even years before the first clinical manifestation of the schizophrenic disorder. During the course of the disorder, there is a shift from positive to negative symptoms, and the long-term outcome of children with very early-onset schizophrenia is poor as compared with the outcome of schizophrenia with manifestation during adolescence or adulthood.

Conclusions: As in very early-onset schizophrenia (manifestation before the age of 13) cognitive and morphological changes are progressive, this disorder can be understood as a progressive-deteriorating developmental disorder.

S54.02

Insight and suicidal behaviour in adolescence

A. Apter*. *Department of Psychiatry, Schneider Childrens Medical Center of Israel, Petach Tikva, Israel*

Objectives: To evaluate the prevalence, nature and correlations of suicidal behaviors in adolescent inpatients diagnosed with schizophrenia. More specifically we examined the relationship of suicidal behavior to phase of illness, presence of and type of depression and degree of insight into illness. In addition the influence of post psychotic depression and negative signs were assessed.

Methods: In three related studies we examined 200 first-admissions to an adolescent psychiatric inpatient unit. Patients with schizophrenia were compared to adolescents with major depressive disorder, other psychiatric diagnoses and normal controls.

Results: Thirty five percent of the schizophrenic patients met provisional DSM-IV criteria for 'post-psychotic depression'. There were differences in quality and content of depression from those found in the depressed patients. In addition we found that it is possible to separate between negative symptoms and depression. Furthermore, we found that post-psychotic depression and suicidal behavior phenomenon is directly correlated with the extent of the awareness and insight into the psychosis. There were differences in the quality of depression and reaction to life stress between schizophrenic subjects and those with major depression.

Conclusion: Depression and suicidal behavior are common in adolescent schizophrenia. These behaviors have specific features that are important to consider when developing preventative measures.

S54.03

Differential diagnosis of psychotic phenomena in children and adolescents

J.K. Buitelaar*. *Department of Psychiatry and Academic Center for Child and Adolescent Psychiatry, UMC St. Radboud, Nijmegen, The Netherlands*

Psychotic phenomena in children and adolescents may be subdivided into signs of formal thought disorder and disturbances in the content of thought, i.e. delusions and hallucinations. Examples of formal thought disorder include illogical thinking, incoherence and loose associations. Signs of formal thought disorder may be apparent from spontaneous speech but may also be elicited and scored by specific procedures as the Kiddie Formal Thought Disorder Story Game (Caplan et al., 1989). Formal thought disorder has been observed in the context of psychotic disorders (early-onset schizophrenia, affective psychoses, and organic psychoses) but also in autistic spectrum disorders, multiple complex developmental disorder, developmental language disorders, personality disorders in adolescence, and ADHD. Hallucinations may be difficult to distinguish from illusions, dissociative states and vivid imagings, and may be occurring in normally developing children on falling asleep (hypnagogic hallucinations). Recent surveys indicate that hallucinations (hearing of voices) may be found in normally developing children in the general population, but may also reflect severe reactions to stress, bereavement, dissociations, and more severe psychopathology as early-onset schizophrenia and depression. More systematic delusions with persecutory or paranoid character often accompany hallucinations and index severe psychopathology as schizophrenia or other psychotic conditions. This presentation will illustrate these points by case vignettes.

S54.04

Results of follow-up studies in child and adolescent onset schizophrenia

C. Fleischhaker^{1,*}, E. Schulz¹, M. Martin², H. Remschmidt². ¹*Department of Child and Adolescent Psychiatry, Albert Ludwig-University, Freiburg.* ²*Department of Child and Adolescent Psychiatry, Philipps-University, Marburg, Germany*

The aims of our two studies were to investigate treatment, course and outcome in early-onset- and very-early-onset schizophrenia. The study included in sample I all inpatients with DSM-III-R very-early-onset schizophrenia (n = 76) consecutively admitted to the Department of Child and Adolescent Psychiatry, Philipps-University Marburg, between 1920 and 1960. In sample II all inpatients admitted between 1983 and 1988 with DSM-III-R early-onset schizophrenia (n = 101) were included. To assess pre-morbid adaptation, precursor symptoms of schizophrenia, treatment and outcome we administered the Instrument for the Retrospective Assessment of the Onset of Schizophrenia (IRAOS). This instrument was modified by our group for investigating children and adolescents. SANS, SAPS and BPRS were employed to measure symptomatology. Additionally, the Global Assessment of Functioning (GAF) was made. After a mean duration of early-onset schizophrenia of 9.5 yrs (sample II), out of the study group, 81 patients (80.2%) could be investigated. Assessment of the highest level of adaptive functioning revealed outcome as following: very good and good (19.8%), fair and poor (38.3%) and very poor and grossly impaired (42%). In study-sample I between 33 and 51 years after the begin-

ning of very-early-onset schizophrenia assessment of the highest level of adaptive functioning revealed a poorer outcome in very-early-onset than in early-onset schizophrenia. A poor prognosis can be found in patients with pre-morbid developmental delays, and in patients who were introverted and withdrawn before the beginning of their psychotic state.

S38. Symposium: Treatment of Alcohol Use Disorders in Psychiatric Services: An Update

(Organised by the AEP Section on Alcoholism and Drug Addiction)

Chairpersons: Mats Berglund (Malmö, Sweden), Karl Mann (Mannheim, Germany)
08:30 – 10:00, Hall D

S38.01

Treatment of alcohol use disorders, an update of organisational aspects

K. Mann*. *Central Institute of Mental Health, Department of Addictive Behaviour and Addiction Medicine, University of Heidelberg, Mannheim, Germany*

Forty percent of patients in psychiatric hospitals carry an addiction diagnosis. Alcohol problems are most prevalent. They are met very differently throughout different European countries. Whereas some countries put a major emphasis on outpatient treatment, others rely heavily on inpatient facilities. There is an emerging trend to better combine both approaches. This requires organizational restructuring in many places. The ideal organizational structure would consist of a multi-dimensional and interdisciplinary approach. Early detection and identification by GPs and specialized counselors would be complemented by psychiatrists providing outpatient treatment, by out and inpatient detoxification possibilities as well as out/ or inpatient rehabilitation programmes. This comprehensive approach to diagnosing and treating people with alcohol problems should be complemented by educational efforts for prevention on all possible levels. Raising public awareness will be an indispensable factor of improving the quality of care. Ideally, research will be integrated. First steps into this treatment and research utopia will be outlined.

S38.02

Brain imaging techniques

A. Heinz^{1,*}, J. Wrase¹, M. Reimold⁴, P. Bartenstein³, G. Gründer³, T. Siessmeier³, K. Mann², T. Kienast¹. ¹*Department of Psychiatry, Campus Charité Mitte, Berlin.* ²*Central Institute of Mental Health, University of Heidelberg, Mannheim.* ³*PET Center, University of Mainz.* ⁴*PET Center, University of Tübingen, Germany*

In the last decade, brain imaging in combination with neurophysiology, genetics and behavioral testing has profoundly increased our knowledge of the neurobiological correlates of alcohol dependence. The disposition to excessive alcohol intake is associated with monoaminergic neurotransmitter dysfunctions that can be visualized with single photon emission tomography (SPECT) and positron

emission tomography (PET). Structural changes following chronic alcohol intake may result from neurotoxic effects and neuroadaptive changes induced by ethanol and are reflected in studies with magnetic resonance volumetry and spectroscopy (MRS). Neurodegenerative and neuroadaptive changes in major neurotransmitter systems were demonstrated with SPECT and PET studies in detoxified alcoholics. Chronic alcohol effects interact with the genetic constitution of monoamine transporters and receptors. The effects of changes in neuroreceptors and transporters on functional brain activation elicited by emotional or alcohol-associated stimuli can be measured with functional magnetic resonance imaging (fMRI). We will present brain imaging studies that addressed neurobiological factors involved in the disposition and maintenance of alcoholism and we will discuss the methodological approaches and constraints of the different brain imaging methods.

S38.03

'Dual Diagnosis': A UK Perspective

I.B. Crome^{1,2,*}. ¹Keele University Medical School. ²North Staffordshire Combined Healthcare NHS Trust, Staffordshire, UK

This presentation will draw on the UK experience in the context of international perspectives. It will describe the burgeoning interest in the field over the last 15 years. Issues related to the complexity of diagnosis and classification will be highlighted. Prevalence data from general population, clinical services, and primary care will be based on recent research findings. Methodological problems will be outlined. Assessment procedures and protocols will be addressed, and appropriate instruments will be described. The evidence base for psychological and pharmacological treatment interventions for this group will be critically reviewed, as treatments for substance misusers usually exclude those with psychiatric illness, and vice versa. The evaluation of service models will be explored. Policies in several countries will be compared and contrasted. The need for increased funding for training and research, as well as service and development, will be stated.

S38.04

Psychopharmacological Treatment

M. Berglund*. *Department of Clinical Alcohol Research, Malmö, Sweden*

Background: Evidence-based treatment for alcohol dependence with medication has considerably improved during the last decade.

Methods: Systematic review of literature as a part of the Swedish SBU-report.

Results: In total, 104 published and 16 unpublished randomized controlled trials assessed the effects of medication on alcohol dependence. The agents acamprosate and naltrexone, have well-documented effects. Acamprosate significantly increases the rate of complete recovery while naltrexone significantly reduces alcohol abuse when the drug is combined with effective psychosocial interventions such as cognitive behavioral therapy. Antabuse (disulfiram) is also documented as an effective method to reduce alcohol intake, but only when used under supervision. Drugs (antidepressants/bupropion) are effective in treating depression or anxiety in alcoholics. However, they have no confirmed effects on alcohol dependence.

Conclusion: Effective pharmacological treatment methods are available both for alcohol dependence and concomitant psychiatric comorbidity.

S38.05

Education

F. Poldrugo*. *Department of Psychiatry, University of Trieste, Italy*

Abstract not received.

W07. Workshop: Brief Eclectic Psychotherapy for PTSD

Chairperson: Ulrich Schnyder, Zurich, Switzerland
08:30 – 10:00, Hall E

W07

Brief eclectic psychotherapy for PTSD

U. Schnyder. *Department of Psychiatry, University Hospital, Zurich, Switzerland*

The 16 sessions Brief Eclectic Psychotherapy (BEP) protocol was originally developed for police officers with PTSD and proved to be effective in a randomized controlled trial. A recent RCT has shown again effectiveness with neuroimaging and a significant decrease of the heart rate. Meanwhile BEP has been used with excellent results for a range of other PTSD patients like after disasters. The treatment starts with psychoeducation on PTSD. The patient and his or her partner learns to understand the symptoms of PTSD as dysfunctional phenomena, caused by the traumatic event. Then 4-6 sessions will follow with relaxation and imaginary exposure, focused on the suppressed intense emotions of sorrow. Memorabilia are used to stimulate remembrances. Patients are asked to write a letter to someone or an institution blamed for the traumatic incident. The letter is specifically used to help to express aggressive feelings. When symptoms have decreased the patient is able to concentrate on the impact of the trauma on his view of him or herself and on the world. This is called the domain of meaning phase. The treatment ends by a farewell ritual with the partner in which the letter or mementos are burned to leave the traumatic incident behind, never to forget but not hindering daily life anymore. In the workshop the different effective elements: psychoeducation, imaginary exposure, the writing task and the use of mementos, the domain of meaning and the farewell ritual will be presented and discussed.

W12. Workshop: Quality of Life and Disability: Towards an Integrative Model in Mental Health Care

Chairpersons: Caner Fidaner (Ankara, Turkey), Aysegel Ozerdem (Izmir, Turkey)
08:30 – 10:00, Hall F

W12

Quality of life and disability: Towards an integrative model in mental health care

Y. Akvardar², K. Alptekin², H. Elbi³, C. Fidaner¹, A. Ozerdem², B. Ustun⁴. ¹Ministry of Health, Cancer Control Department, Ankara. ²Department of Psychiatry, Dokuz Eylul University, Izmir.

³Department of Psychiatry, Aegean University, Izmir, Turkey.

⁴Department of Evidence for Health Policy, World Health Organisation, Geneva, Switzerland

Aim: To introduce the formulation of quality of life (QOL), health and disability concepts and to search for an integrative model in which these concepts can be utilised to make the future health care plans more efficient.

Background: QOL concept extends beyond symptoms, disease and covers individual's subjective feelings of satisfaction and well-being. Measuring QOL in health and mental health care requires a careful delineation of these constructs as well as a multidimensional approach. A conceptual presentation will outline the basic premises and interrelations of concepts of health, disability and quality of life.

Topics to be discussed: The classification systems and instruments will be presented, including the WHO Quality of Life Assessment (WHOQOL) which is a generic instrument, that assesses perceived QOL on physical, psychological, social relationship and environmental domains. The results of validity and reliability studies for Turkish population and scale's use in schizophrenia, alcohol dependence and bipolar disorder will be mentioned. The possible impact of stigmatisation on QOL, applications in schizophrenia, alcohol dependency and bipolar disorder will be discussed. Also, benefits of this instrument to improve prospective mental health services will be presented. Expected results of workshop: It is expected that the audience will have an idea both on general uses of QOL scales and some specific studies. The need to use both subjective and objective criteria to understand real impact of psychiatric diseases will appear; it is expected that new ideas to develop such instruments and to plan innovative research projects will be nourished.

Free Communications: Other Issues III

08:30 – 10:00, Hall G

Quality of life assessment in acutely ill in-patients: Does it help to improve routine clinical care?

U.M. Junghan*, C. Teschner, P. Locher, A. Lanser, M. Pfammatter, H.D. Brenner. *University Hospital for Social and Community Psychiatry, Bern, Switzerland*

Aims: The quality of life (QoL) of persons suffering from severe mental disorders has become an important criterion in the evaluation of psychiatric health care delivery. Despite of an extensive body of literature in this field, QoL in acute inpatients has hardly been investigated. As a consequence there is little knowledge to what extend subjectively perceived QoL might be of help for therapeutic decisions in this stage of treatment. The aim of this study is to assess to what extend symptoms and living conditions in acute inpatients relate to their experience of QoL and what conclusions can be drawn from QoL-measures pertaining to the conception of treatment plans.

Methods: Within the framework of a prospective trial QoL, psychopathology symptoms and variables characterising the objective living conditions were investigated in a sample (n=128) of consecutive acute inpatients. The inter-relation between relevant factors were explored by multivariate statistics.

Results: QoL ratings only partly reflect the marked differences in objective living conditions among diagnostic subgroups. How-

ever, there are complex interrelations between objective living conditions and distinct psychopathology symptoms that are related to delimited, independent domains of QoL.

Conclusions: Also in acute inpatients satisfaction with key areas of life seems to be related to their objective living conditions on a limited scale. However the association between illness related symptoms, living conditions and different domains of QoL bears essential information for the treatment planning beyond the inpatient episode. Thus the assessment of QoL appears to be a useful measure also during acute care.

Determinants of illness related concepts and control beliefs in acute psychiatric inpatients: The relevance of psychopathology

F. Siegenthaler*, D. Schuler, U.M. Junghan, A. Lanser, M. Pfammatter, C. Teschner, H.D. Brenner. *University Hospital of Social and Community Psychiatry, Bern, Switzerland*

Individual illness related concepts represent a set of assumingly stable interpretations, explanations and expectations as regards in individuals states of health. These beliefs significantly influence the compliance behavior of psychiatric patients and therefore treatment outcome. Nevertheless little is known about the relationship between patients attitudes towards illness and treatment and psychiatric symptoms. In consideration of this fact our interest lies in identifying psychopathological syndromes associated with patients illness concepts. In a prospective study we examined a sample of consecutive acute inpatients (N=180). After having given informed consent these individuals underwent a detailed examination. The assessment included the rating of psychopathology symptoms (Brief Psychiatric Rating Scale, AMDP scales), variables describing attitudes towards illness (Illness Concept Scale, KK-Skala) and control beliefs (Questionnaire for Competence and Control, FKK). Data were analyzed by means of multivariate statistics. Our results show associations between illness concepts and control beliefs such as trust in medication and in the treating physician, negative treatment expectations, idiosyncratic assumptions and expectancies of self-efficacy - and distinct psychiatric symptoms. As a conclusion our findings point to the importance of a detailed assessment of patients psychopathology for the understanding of health beliefs and illness concepts that are important determinants of the treatment process and outcome.

Comparing satisfaction with mental health services among persons with schizophrenia in five European countries. Results from the EPSILON Study

A. Lasalvia^{1,*}, M. Ruggeri¹, G. Bisoffi¹, G. Thornicroft², J.L Vázquez-Barquero³, T. Becker⁴, M. Knapp⁵, H.C. Knudsen⁶, A. Schene⁷, M. Tansella¹. ¹Department of Medicine and Public Health, Section of Psychiatry, University of Verona, Italy. ²Health Services Research Department, Institute of Psychiatry, King's College, London, UK. ³Clinical and Social Psychiatric Research Unit, Department of Psychiatry, University of Cantabria, Santander, Spain. ⁴Department of Psychiatry, University of Leipzig, Germany. ⁵Centre for the Economics of Mental Health, Health Services Research Department, Institute of Psychiatry, King's College, London, UK. ⁶Institute of Preventive Medicine, Copenhagen University Hospital, Denmark. ⁷Department of Psychiatry, Academic Medical Centre, University of Amsterdam, The Netherlands

Background: Five key-questions on mental health services satisfaction were addressed in this European collaborative study: (1)

Does levels of satisfaction differ across five European sites? (2) Are perceived weaknesses and strengths of services similar across the five European sites? (3) Is higher satisfaction associated with lower number of patients' unmet needs? (4) Is satisfaction related to patients' socio-demographic characteristics and illness severity? (5) Is service satisfaction associated with patients' satisfaction with life?

Methods: A sample of 404 people with schizophrenia in five European sites (Amsterdam, Copenhagen, London, Santander, Verona) was assessed within the EPSILON Study, using the Verona Service Satisfaction Scale. Stepwise multiple linear regression analyses were used to determine predictors of patients' satisfaction.

Results: (1) Satisfaction differed significantly across sites, being highest in Copenhagen and lowest in London. (2) High degree of service specificity in levels of satisfaction was detected across sites; however, the least levels of satisfaction were consistently found in 'Involvement of relatives in care' and 'Information about illness'. (3) Higher satisfaction was associated with lower unmet needs. (4) Socio-demographics had low impact on satisfaction; more severe psychopathology was associated with lower satisfaction. (5) Higher service satisfaction was positively associated with higher satisfaction with life.

Conclusions: It is conceivable that service satisfaction may be the joint effect of (1) the ability of the service to provide a standard of care above a certain quality threshold and (2) the perception of each individual patient that the care received has been specifically tailored to his/her specific problems.

Prevalence and risk factors of compulsory psychiatric hospitalization in Israel

A. Bauer^{1,2,4,*}, P. Roska^{1,2,5}, A. Grinshpoon^{1,3}, A. Ponizovsky^{1,3}.
¹Ministry of Health. ²Forensic Psychiatry Department. ³Research and Assessment Department, Ministry of Health, Jerusalem. ⁴Tel-Aviv University Medical School, Ramat Aviv. ⁵Jerusalem University Medical School, Israel

Objective: To describe a large national cohort of patients with a first ever compulsory admission to all psychiatric settings in Israel between 1991 and 2000 with regard to their socio-demographic variables and diagnosis.

Method: The National Psychiatric Case Registry provided the data on the study variables on all patients (voluntary N=23,643; compulsory, N=11,156) admitted to psychiatric units over one decade. Both groups were compared using chi-square statistics. Logistic regression analysis was used to identify demographic and clinical factors of risk for compulsory admission.

Results: There was a longitudinal linear trend with a 2.3-fold increase in first compulsory admissions over the decade studied. Risk factors associated with first compulsory admission included: male gender (odds ratio [OR]=1.7, p<0.0001), being Jewish (vs. other religious affiliation; OR=1.2, p<0.001), and having the diagnosis of schizophrenia or delusional psychosis (vs. other ICD-10 categories; OR=2.5, p<0.0001). Logistic regression data analysis identified also variables associated with low likelihood of such a hospitalization: age 25-64 years (vs.18-24 and 65+; OR=0.7, p<0.0001), being married (vs. all other categories; OR=0.7, p<0.0001), having 9+ years of education (vs.<8; OR=0.8; p<0.0001), being immigrant (vs. veteran, OR=0.8, p<0.0001), and experiencing attempted suicide 2 months before the index hospitalization (vs. none; OR=0.8, p<0.0001).

Conclusions: The results suggest that there is both a longitudinal trend over time toward the increase in first compulsory psychiatric hospitalizations in Israel and a typical profile for patients at high risk for such a pattern of hospitalization.

Global functioning in schizophrenia. Comparative clinical and psychosocial data of community living versus non-hospital residential facilities treated chronic schizophrenics

S. Zizolfi^{1,*}, G. Cilli¹, R. Nava², N. Poloni³. ¹Department of Mental Health, Como. ²Azienda Ospedaliera Universitaria, Monza. ³Azienda Ospedaliera Universitaria, Università Dell'Insubria, Varese, Italy

In Italy, where all mental hospitals have been gradually phased out since 1978, more than 17000 psychiatric patients requiring long-term care are being treated in more than 1370 non-hospital residential facilities (NHRFs) (De Girolamo et al., 2002). The present paper aims to show comparative data about clinical and psychosocial aspects of NHRFs treated versus Community Living (CL) chronic schizophrenics. 160 DSM IV-TR chronic schizophrenics, 18-65 years old, with no serious organic disease or physical handicap, with long-lasting disease (more than 15 years), receiving long-lasting (at least four years) continuation antipsychotic treatment, undergoing regular monthly controls during the last four years, with no symptom or sign of clinical exacerbation or need for hospitalization during the last year, entered the study. 50 patients were treated in NHRFs (Group A), while 110 were Community Living (Group B) in the same geographic area (North Lombardia, Italy). All the patients were administered, on the same occasion, the Brief Psychiatric Rating Scale (BPRS), the Life Skills Profile (LSP) and the Profile of Community Psychiatric Patients (PCPC). The results were statistically analyzed by means of Student t test and Pearson r. Group A 50 NHRFs treated patients, when compared with Group B 110 CL patients, show an older age, a lower scholasticity, a longer duration of illness, lower BPRS scores, lower life skills performance (LSP total scores), and lower global psychosocial adjustment (PCPC total score). Our results remark the need of a comprehensive assessment of NHRFs treated patients, integrating both symptomatological and psychosocial measures.

Work and severe mental disorders in five European countries

J. Rymaszewska^{1,*}, A. Kiejna¹, T.W. Kallert², P. Nawka³, S. Priebe⁴, J. Raboch⁵. ¹Department of Psychiatry, Wrocław Medical University, Wrocław, Poland. ²Department of Psychiatry and Psychotherapy, Dresden University of Technology, Faculty of Medicine, Germany. ³Michalovce Psychiatric Hospital, Slovak Republic. ⁴Unit for Social and Community Psychiatry, Barts and the London School of Medicine, London, UK. ⁵Department of Psychiatry, Charles University of Prague, First Medical Faculty, Czech Republic

Published studies linking the common mental disorders with occupational disadvantages lack international comparability. This cross-national project aimed to estimate occupational functioning of people with different severe mental disorders in European countries.

Method: Based on data from EDEN study1, n=1055 working-age patients with acute mental disorders attending psychiatric hospitals from Czech (CZ), England (UK), Germany (G), Poland (PL) and Slovakia (SL) were assessed at admission and follow-up 3

months after discharge. Variables corresponding to sociodemographics, psychopathology and occupational disability were registered using the Brief Psychiatric Rating Scale and the Groningen Social Disabilities Schedule.

Results: Of the total sample (mean age=38,95; 59,8% females), 30,2% were employed, 29,3% were unemployed and 25,9% received disability pension. There were significant differences among countries in employment rate within the sample: 43,6%(CZ), 17,9%(UK), 43,7%(G), 17%(PL) and 32,1%(SL) ($p=.000$). Within subjects with schizophrenia, there were nearly three times more working Germans than other nations. Among disability pension beneficiaries, subjects with schizophrenia predominated (45,9%) in comparison to affective (30%) and anxiety disorders (10,7%). Lack of occupational disability were in 10,2%, severe disability - in 22,7% of total sample, with significant differences among centers ($p=.000$). The most disabled in occupational role revealed patients in Poland (35,9%), the least - in England (18,4%).

Conclusions: A large disproportion in occupational functioning of persons with mental disorders living in different European countries was found. Further cross-national analyses will explore reasons of differences such as individual and external conditions (e.g. unemployment rate, disability compensation systems, social attitudes and support). www.eden-study.com

S64. Symposium: Acute Day Hospitals: Results on Effectiveness and Health Policy Impact

Chairpersons: Thomas W. Kallert (Dresden, Germany), Stefan Priebe (London, UK)
08:30 – 10:00, Hall H

S64.01

Results of recent national day hospital surveys in 5 European countries

J. Raboch^{1*}, T.W. Kallert², A. Kiejna³, P. Nawka⁴, S. Priebe⁵, A. Howardova¹. ¹*Psychiatric Department, 1st Medical School of Charles University, Prague, Czech Republic.* ²*Department of Psychiatry and Psychotherapy, University of Technology, Dresden, Germany.* ³*Department of Psychiatry, Wrocław Medical University, Poland.* ⁴*Psychiatria Nemocnica, Michalovce, Slovak Republic.* ⁵*Unit for Social and Community Psychiatry, Newham Centre for Mental Health, London, UK*

Objective: To present results of recent national day hospital surveys in Germany, Czech Republic, Poland, Slovak Republic and England. We want to show differences and similarities in structural and procedural features and in conceptual orientations of services in these five countries.

Method: The European Day Hospital Evaluation (EDEN) study group has carried out national surveys of day hospitals for general psychiatric patients in 2001–2002, using a self-developed structured questionnaire.

Results: In different countries response rate varied from 59 to 91%. We found heterogeneity both on national and international levels in structural and procedural features. We have identified three main clusters of conceptual orientations dividing the services into category focusing mainly on rehabilitative tasks; category that's

main function is to provide acute treatment as alternative to inpatient care. The third category is not defined by outstanding main program function. Distribution of these clusters among the countries is different.

Conclusion: There is need for continuous monitoring of the development of psychiatric services and repeated measurements should be conducted as a routine. Database like this will provide the opportunity to evaluate health political goals.

S64.02

Methodological issues in carrying-out the multi-centre EDEN-study

A. Kiejna^{1*}, J. Rymaszewska¹, T.W. Kallert², P. Navka³, S. Priebe⁴, J. Raboch⁵. ¹*Department of Psychiatry, Wrocław Medical University, Faculty of Postgraduate Medical Training, Poland.* ²*Department of Psychiatry and Psychotherapy, Dresden University of Technology, Faculty of Medicine, Germany.* ³*Michalovce Psychiatric Hospital, Slovak Republic.* ⁴*Unit for Social and Community Psychiatry, Barts and the London School of Medicine, UK.* ⁵*Department of Psychiatry, Charles University of Prague, First Medical Faculty, Czech Republic*

The purpose of the RCT study* was to compare day hospital treatment with conventional inpatient care for acute psychiatric patients in different European centers (Dresden, London, Wrocław, Michalovce and Prague). Design of the EDEN-study: Patients ($n=1055$) with acute mental disorders were examined at 6 time-points (children and youths, patients aged >65yrs, compulsory admissions and patients with primary substance abuse disorders were not included). Observation period cover index-hospitalization with a one year follow-up assessing the following objective and subjective outcome criteria: psychopathology (SCAN, BPRS), quality of life (Manchester Short Assessment of Quality of Life), assessment of needs (Berlin Needs for Care Inventory), social functioning (Groningen Social Disabilities Schedules), satisfaction with care (Client's Scale for Assessment of Treatment), burden on relatives (Involvement Evaluation Questionnaire) and costs for treatment (Client Service Receipt Inventory). Quality assurance measures on whole consortium and each center level included adaptation of survey instruments, randomisation procedure and rates, education of interviewers on international and national level and data quality control. Inter-rater reliability training of researchers focusing on the assessment of psychopathology (BPRS) and social disabilities (GSDS) were continuously conducted, based on joint rating exercises using written materials and video recordings. Implementing the international RCT study met several obstacles and difficulties. It required reorganization of clinical procedures, co-operation of multi-disciplinary teams with varying levels of clinical experience and attitudes towards functions of the treatment settings, changing of prevailing beliefs about patients not being suitable for day hospitalisation. *Funded by the Fifth Framework Programme of the European Commission and national grants.

S64.03

Effectiveness results on acute day hospital treatment from the EDEN-study

T.W. Kallert*. *Department of Psychiatry and Psychotherapy, University of Technology, Dresden, Germany*

Background: Results from previous single-site randomised controlled trials stimulate the research question if site-differences

have implications for effectiveness results of acute day hospital treatment.

Method: The EDEN-study is the first multi-site RCT in this field, conducted in Dresden (Germany), Newham (East-London), Wrocław (Poland), Michalovce (East-Slovakia), and Prague (Czech Republic). Within the recruitment period (12/2000 - 06/2002) 1117 patients - fulfilling inclusion criteria demonstrating the need for acute hospital treatment - were randomised and 1036 received the intended treatment. During the index-treatment episode, patients have been assessed up to four times (admission, 1 week and 4 weeks after admission, discharge). Results in this presentation focus on the outcome criteria psychopathology (BPRS 24-item version), subjective quality of life (MANSAs), and satisfaction with treatment (CAT). In multivariate linear variance-analytical fixed effects models using individual time in treatment as covariate no setting effects for the assessed outcome criteria could be found for the whole study population. However, there are significant setting x centre interaction effects particularly for the discharge status of all outcome variables. Data from the German centre demonstrate a 25% cost-saving effect of day hospital treatment compared with the direct treatment costs in the inpatient setting. A model calculation outlines the amount of money that could be saved for the national health care system if this treatment approach would be increased.

Conclusion: Context-dependency of results as well as characteristics of the national situation in the assessed mental health service configuration have to be taken into account in order to generalize results.

S64.04

The burden on relatives in day hospital treatment and inpatient treatment for acute mentally ill. Results from a multi-site randomised controlled trial

M. Schützwohl*, T.W. Kallert. *Universitätsklinikum C.G. Carus, Klinik und Poliklinik für Psychiatrie und Psychotherapie, Dresden, Germany*

Objective: To assess the burden on relatives within a multi-site RCT comparing acute psychiatric day-hospital treatment to inpatient treatment.

Method: In general psychiatric hospitals providing both treatment settings in the Czech Republic, Germany, Poland, and the Slovak Republic, a group of relatives was assessed at patients' admission, after four weeks of patients' treatment, and three months after patients' discharge using the Involvement Evaluation Questionnaire (IEQ).

Results: Day-hospital treatment and inpatient treatment did not differ with respect to the relatives' overall burden, neither concerning the relief provided during the first four weeks of treatment nor concerning the post-treatment course. In both settings, burden on relatives during the first four weeks of treatment could be predicted by burden prior to treatment, patients' health status within the fourth week of treatment, and a dichotomised site variable.

Conclusion: Treating acute mentally ill as day-hospital patients does not result in greater overall burden on relatives compared to treating them as inpatients.

S64.05

Cultural and contextual factors influencing the implementation and results of the EDEN trial

S. Priebe*. *Unit for Social and Community Psychiatry, Newham Centre for Mental Health, London, UK*

The EDEN trial was conducted in 5 countries, including sites in Western Europe and former socialist countries. Political traditions, social welfare systems, health care arrangements, funding and organisation of mental health care as well as more general cultural aspects vary substantially between the sites. This paper considers whether such cultural and contextual differences impact on the implementation and results of the trial. Rates of recruitment, consents to participate and drop-outs of patients as well as their relatives and final results were compared between centres. Recruitment, consent rates, drop-out rates and results showed significant variation between centres. It will be discussed whether and, if so, in what way cultural and contextual factors can help explain these differences. One may conclude that contextual factors have a strong impact on the implementation and results of trials concerning mental health service configuration, and that new methods may have to be developed to assess these factors for an appropriate interpretation of the results of the trial.

S61. Symposium: Season of Birth and Psychiatric Disorders in European Countries of Different Latitudes

Chairpersons: Giuseppe Bersani (Rome, Italy), Vidje Hansen, Tromsø, Norway

08:30 – 10:00, Hall I

S61.01

Season of birth in schizophrenia in arctic northern Norway

V. Hansen^{1,*}, G. Bersani², D. Pucci². ¹*Institute of Clinical Medicine, Faculty of Medicine, University of Tromsø, Norway.* ²*La Sapienza' University, Rome, Italy*

The case register for the Psychiatric Department at the University hospital of northern Norway for the period 1980 to 2002 covers all admissions for serious mental disorder in a population of 225 000 persons. The register comprises about 1500 admissions of some 3500 different persons. About 50% of all admitted patients have a diagnosis of schizophrenia. The season of birth of these patients will be compared to the pattern of birth in the general Norwegian population.

S61.02

Seasonal variation of births in schizophrenia: Evidence from Finnish cohorts born from 1950 to 1969

J.M. Suvisaari^{1,2,*}. ¹*Department of Mental Health and Alcohol Research, National Public Health Institute.* ²*Department of Psychiatry, Helsinki University Central Hospital, Finland*

The seasonal birth pattern of patients with schizophrenia differs from that of the general population. A 5-8% winter-spring excess and a comparable summer-autumn deficit have been reported in numerous studies. The cause of this phenomenon is unknown. We compared the seasonal variation of births among patients with schizophrenia born from 1950 to 1969, their unaffected siblings born in the same years, and general population born from 1950 to 1969. We found that seasonal variation of births among patients born in the 1950s, especially among those born between 1955 and

1959, was marked, but decreased considerably among patients born in the 1960s. The risk of having been born during the winter-spring months were slightly higher among both siblings and patients in all birth-year groups. However, patients born from 1955 to 1959 showed prominent seasonal variation of births, but the magnitude of this variation remained unchanged among siblings. Our findings suggest that seasonal variation of births among patients with schizophrenia may consist of two factors: parental procreational habits causing a slight excess of births of both patients and unaffected siblings during the winter-spring months and irregular environmental factors that considerably increase the magnitude of the seasonal variation of births among patients but not their siblings. We found no association between proband's month or season of birth and siblings' risk of schizophrenia.

S61.03

Seasonal correlation of schizophrenic birth excesses to Lyme borreliosis

M. Fritzsche*. *Clinic for Internal Medicine, Adliswil, Switzerland*

Although Hippocrates (460 BC) recognised the importance of 'the seasons of the year and the effects they produce ... being common to all countries as well as peculiar to each locality', systematic research into the season of psychiatric birth effects began only after the turn of the last century. Being born during winter and spring is nowadays considered one of the most robust epidemiological risk factors for developing sporadic schizophrenia later in life. The cause and exact timing of this birth excess, however, has remained elusive until recently. Since during phylogeny, *Borrelia* DNA has led to multiple germ-line mutations within the CB1 candidate gene for schizophrenia, a meta analysis has been performed on all schizophrenic birth excesses. For statistical reasons, only birth studies compared to the normal population and encompassing no less than 3000 cases each have been considered. The significant numerical data were then taken together and plotted against the seasonal distributions of *Borrelia* (*B.*) *burgdorferi* transmitting *Ixodes* ticks worldwide. In the United States, Europe and Japan the meta analysis revealed a seasonal correlation between the time of conception and *Ixodes* tick activity, that is, the schizophrenic birth excesses of those individuals who later in life developed schizophrenia mirrored the seasonal distribution of *Ixodes* ticks nine months earlier. South of the Wallace Line, which limits the spread of *Ixodes* ticks and *B. burgdorferi* into Australia, the seasonal trends were less significant, and in Singapore, being non-endemic for *Ixodes* ticks and Lyme disease, schizophrenic birth excesses were absent.

S61.04

Season of birth and peripheral biochemical markers in psychiatric patients in Croatia

D. Mueck-Seler*. *Division of Molecular Medicine, R. Boskovic Institute, Zagreb, Croatia*

Background: It has been suggested that the season of birth may be a risk factor for the development of mental disorders, that could be related to different latitudes.

Aim: We investigated the relationship between seasonality and peripheral biochemical markers: platelet serotonin (5-HT) and plasma cortisol levels in patients and control subjects in Croatia (latitude 45° 10' north of the equator).

Methods: The study included schizophrenic, depressed (unipolar, bipolar) patients and patients with Alzheimer's disease, recruited

during a five-year period. The seasons were: winter (December, January, February), spring (March, April, May), summer (June, July, August) and autumn (September, October, November). The controls were healthy men and women with no personal or family history of psychopathology.

Results: Similar occurrence of mental disorders was observed in male and female subjects independent of their season of birth. There was no relationship between the season of birth and biochemical parameters in healthy persons. Platelet 5-HT concentration was increased in winter born male and female schizophrenics and in winter and spring born male and female depressed patients when compared to the values in patients born in other seasons. There was a difference in cortisol levels between male and female depressed patients born in autumn.

Conclusions: Our results add further support to the influence of the season of birth on the serotonergic system and HPA axis activity, that may be limited to Croatia's latitude. The data suggest a possible influence of the length of photoperiod during the perinatal period on the development and function of serotonergic neurons.

S61.05

Excess in spring and deficit in autumn of births of male schizophrenic patients in Italy. Possible relationship with viral infection and nutritional habits

G. Bersani^{1,*}, D. Pucci¹, S. Gherardelli¹, J.F. Osborn², P. Pancheri¹.
¹*Department of Psychiatric Services and Psychological Medicine.*
²*Department of Public Health, University 'La Sapienza', Rome, Italy*

Background: Data from the Northern hemisphere support an excess of winter-spring births of individuals who later will develop Schizophrenia. Some explanations of such birth-season-effect suggest an increased rate of pre- and perinatal brain injury caused by known seasonal variations in factors such as infectious diseases, nutritional deficiencies during pregnancy, prenatal exposure to alcohol, obstetric complications.

Objective: The aim of this study was to evaluate whether there were seasonal variations of births among patients with both Schizophrenia and other psychotic disorders in Italian population.

Method: Birth dates of 1270 patients admitted to 'Policlinico Umberto I' in Rome between 1990 and 2003, with diagnosis of Schizophrenia, Other Psychotic Disorder and Personality Disorder/Cluster A were studied using the chi square test.

Results: A significant excess of births in spring (with a peak in May) and a deficit in autumn (with a trough in October) were found in the sample of male schizophrenics. No statistically significant results were found neither in the overall group of psychotic subjects, nor in the sample of female schizophrenics, nor in the sample with OPD and with PD.

Conclusions: Whatever is the factor responsible, it must act early enough in intrauterine development and also have a seasonal variation. A possible explanation of this finding is that mostly Schizophrenia vulnerability genes interact with the considered environmental factors in males. The even previously observed lack of seasonal variation for female schizophrenics might be explained on the 'genetic morphism' hypothesis: the genes endow this subgroup of schizophrenics with better capabilities of resisting various environmental factors.

IMS3. Interactive Main Session: Community Psychiatry: Myth or Reality?

Chairpersons: Povl Munk-Jørgensen (Risskov, Denmark), Mónika Kovács (Budapest, Hungary)
10:30 – 12:00, Hall A

IMS3

Introduction to the Interactive Main Session “Community Psychiatry - Myth or Reality?”

Povl Munk-Jørgensen¹, Monica Kóvacs². ¹*Department of Psychiatric Demography, Institute for Basic Psychiatric Research, Psychiatric Hospital in Aarhus, Risskov, Denmark.* ²*Faculty of Medicine, Institute of Behavioral Sciences, Budapest, Hungary*

European community psychiatry in its present forms and variations has developed over the past 30–40 years. Many psychiatrists agree that resourceful community psychiatry is a benefit to minor groups of severely ill patients with massive social complications, also for prevention of social complications in new cases of severe mentally illnesses. On the contrary, community psychiatry has many opponents claiming that it is not able to give sufficient biomedical support to patients because of difficulties in updating neuropsychiatric knowledge among treating psychiatrists and caring staff working in the community. This session will be initiated by some aspects of the status of European community psychiatry today given by Professor Thomas Becker from Günzburg/Ulm in Germany, followed by a con speech by Professor Cyril Höschl from Praha, Czech Republic. After that Professor Graham Thornicroft from London, UK will present some pro arguments on behalf of himself and Professor Michele Tansella from Verona, Italy. The session will then continue with comments and discussions from the audience and finally be summed up by the chairman.

S28. Symposium: Neurobiology of Cognitive Dysfunctions in Schizophrenia

Chairpersons: Janusz K. Rybakowski (Poznan, Poland), Tonmoy Sharma (Dartford, UK)
10:30 – 12:00, Hall B

S28.01

Eye movement disturbances as endophenotypic marker of schizophrenia

J.K. Rybakowski^{1,*}, A. Borkowska², P.R. Czerski³, J. Hauser^{1,3}. ¹*Department of Adult Psychiatry, Poznan University of Medical Sciences, Poznan.* ²*Clinical Neuropsychology Unit, University Medical School, Bydgoszcz.* ³*Laboratory of Psychiatric Genetics, Poznan University of Medical Sciences, Poland*

Eye movement disturbances occurring during fixation and smooth pursuit task have been suggested as endophenotypic marker for genetic studies of schizophrenia. They are demonstrated in over

80% of schizophrenic patients, in 30–40% of their healthy first degree relatives and in less than 10% of control subjects. Molecular genetic studies showed a linkage of these abnormalities with DNA marker on chromosome 6p21–23 regions. In schizophrenic patients, we observed a significant correlation between the intensity of eye movement disturbances and the presence of antigen HLA-A24 and the absence of the antigen HLA-A28, connected with this region. Our group also studied a possible relationship of these disturbances with polymorphism of selected genes of dopaminergic system, using candidate gene approach. An association was found between the intensity of abnormal eye tracking and Ser9Gly polymorphism of dopamine receptor D3 (DRD3) gene: higher intensity of both kinds of disturbances was associated with Ser allele. The study of Val158Met polymorphism of gene for catechol-O-methyltransferase (COMT), the enzyme metabolizing dopamine in prefrontal cortex, revealed an association between Met allele and lower intensity of eye movement disturbances in male schizophrenic patients. Finally, a connection was found between a greater degree of eye movement abnormalities and A2/A2 genotype of cytosolic phospholipase A2, the key enzyme of the phospholipid metabolism, also influencing dopaminergic activity. We suggest that abnormal eye tracking can be viewed as one pleiotropic manifestation of schizophrenia and association of polymorphism of various genes with eye movement disturbances may be stronger than with the illness itself.

S28.02

Prepulse inhibition in schizophrenia: Effects of antipsychotics and hormones

V. Kumari^{1,*}, T. Sharma². ¹*Institute of Psychiatry, London.* ²*Clinical Neuroscience Research Centre, Dartford, UK*

Prepulse inhibition of the startle response (PPI) refers to an attenuation in response to a strong stimulus (pulse) if this is preceded shortly by a weak stimulus (prepulse). It provides a simple measure of sensorimotor gating, serving to prevent the interruption of ongoing perceptual and early sensory analysis. In accordance with postulated early information processing deficits in schizophrenia, reduced PPI is found in affected individuals. PPI is considered a well-validated animal model for evaluating potential new treatments for schizophrenia. Several cross-sectional studies by independent groups suggest that effective antipsychotic medication, perhaps more so with atypical antipsychotics, at least partially normalizes PPI in patients, although no effect of short-term antipsychotic treatment was noted in two studies (from different groups) employing a within-studies design. It is possible that (close to) normal PPI seen in patients tested in cross-sectional studies reflected the effects of treatment in patients who showed good responsiveness to a particular drug over a relatively longer period (perhaps after less effective trials with other antipsychotics) which was the most effective for them at the individual level, but perhaps not for the entire schizophrenia population. Further longitudinal within-subjects data from medication-responsive and medication-resistant patients, controlling for possible confounders, such as the effects of other concomitant medications and smoking status, are required to clarify medication effects on PPI in schizophrenia. Furthermore, examination of sex and hormonal influences is necessary in such studies, given recent data on sex differences in PPI deficits in schizophrenia and hormonal influences in PPI in healthy women.

S28.03

Neuropsychology of prefrontal function in schizophrenia: Molecular genetic studies

A. Borkowska^{1*}, P.M. Czerski², J. Hauser², J.K. Rybakowski³.
¹*Clinical Neuropsychology Unit, University School of Medicine, Bydgoszcz.* ²*Laboratory of Psychiatric Genetics, Department of Psychiatry.* ³*Department of Adult Psychiatry, University School of Medical Sciences, Poznan, Poland*

Neuropsychological studies indicate that deficit in working memory and executive functions, connected with abnormalities of dorsolateral prefrontal cortex is most important in schizophrenia. Performance on tests measuring these functions, e.g. Wisconsin Card Sorting Test (WCST) has been regarded as an endophenotypic marker in schizophrenia. Previous studies have shown an association between the performance on WCST and gene polymorphism of catechol-O-methyltransferase (COMT), the enzyme responsible for dopamine breakdown in prefrontal cortex. The results of our study showed an association between Met/Met genotype of COMT gene and performance on WCST in schizophrenia. Analysis of interaction between polymorphism of genes for dopamine receptors (DRD2, DRD3 and DRD4) and genes for their inactivating factors (dopamine transporter - DAT, norepinephrine transporter - NET and COMT) revealed a number of associations with WCST results. They were connected with combination of DRD2 and DAT or COMT polymorphism, DRD3 and DAT or NET polymorphism and DRD4 and DAT or COMT polymorphism. However, in our study no association was found between WCST performance and polymorphism of brain-derived neurotrophic factor (BDNF) gene in schizophrenic patients. The results obtained may suggest a contribution of dopaminergic system genes to the performance of schizophrenic patients on neuropsychological test of prefrontal cortex function such as WCST. This has been mostly expressed as interaction between polymorphism of genes for dopamine receptors and genes for their inactivating agents.

S28.04

Effect of novel antipsychotics on cognition and information processing in schizophrenia using fMRI

T. Sharma^{1*}, V. Kumari². ¹*Clinical Neuroscience Research Centre, Dartford.* ²*Department of Psychology, Institute of Psychiatry, London, UK*

Cognitive impairment is a central feature of schizophrenia. Most patients have a poor functional outcome, including deficits in social, occupational, and self-care activities. The cost borne by the society in terms of social welfare administration and criminal justice, the time spent by unpaid caregivers, and the great loss of productivity due to the illness itself, are perhaps greater than the direct costs, such as, hospitalization. Functional deficits in schizophrenia are most strongly predicted by the current severity of cognitive impairment, followed by the severity of negative symptoms. Severity of positive symptoms is not strongly associated with the level of functional impairments, even in those with very poor outcome schizophrenia. There is thus an urgent need to find strategies for improving cognitive functioning in schizophrenia. Functional MRI (fMRI) is a non-invasive technique with good temporal and spatial resolution. It requires no radioactivity and offers the ability to map,

almost in real-time, the physiological events occurring in the brain. fMRI can be used as a tool to map the longitudinal effects of antipsychotic drugs on the brain in schizophrenia. It allows us to carry out repeated measurements of cerebral neuronal activity and to investigate functional changes in the brain in treatment responders and non responders. It is thus possible to map the functional anatomy of neurocognitive improvement with atypical antipsychotics in schizophrenia. This presentation will outline new methods of brain imaging and how these methods may allow us to understand the long-term effects of cognitive improvement with antipsychotic drugs in schizophrenia.

S44. Symposium: Individualised Pharmacotherapy of Psychiatric Patients

(Organised by the AEP Section on Psychopharmacology)

Chairpersons: Manfred Ackenheil (Munich, Germany), Julio Bobes (Oviedo, Spain)

10:30 – 12:00, Hall C

S44.01

Pharmacogenomics

P. Baumann*. *Hopital de Cory, Department of Psychiatry, Lausanne, Switzerland*

Abstract not received.

S44.02

Pharmacotherapy of depression: The problem of comedication, what has to be considered?

M. Ackenheil*, K. Weber. *Psychiatric Hospital of the Ludwig-Maximilians-University, Munich, Germany*

Depression is a heterogeneous psychiatric disorder. Unipolar and bipolar, subsyndroma and severe depression, depression with psychotic factors, with melancholia, suicidality, psychiatric comorbidities and with functional somatic symptoms have to be treated in clinical practice. According to these different forms, comedication is rather the rule than the exception. Up to three medicaments are normal, and additionally in the elderly medicaments for somatic diseases are prescribed. Many of these drugs show interactions both on the level of pharmacokinetic and pharmacodynamic. Psychotropic drugs are metabolised by various P 450 cytochromes (CYP2D6, CYP2C19, 1A3 etc.). This activity of the cytochromes is individually different and influenced by genetic factors as well as dietary habits. Drugs can either inhibit or induce this activity. An alteration of this enzyme activity changes the elimination of the drug and of its metabolites. Increased or reduced blood levels are the consequences and even the pharmacological profile can be changed. On the pharmacodynamic level synergistic or alternating effects are resulting from such drug interactions. Knowing the metabolising enzymes involved in the pharmacokinetic of each drug and the specific receptor profiles gives hints for useful combinations and help to avoid unuseful interactions. Examples will be given for the above-mentioned different subtypes of depression.

S44.03

Therapeutic drug monitoring

F. Bengtsson*. *Division of Clinical Pharmacology, Linköping, Sweden*

Abstract not received.

S44.04

Impairment of quality of life due to side effects

J. Bobes*. *Department of Psychiatry, University of Oviedo, Spain*

The relationship between quality of life and side effects has been a matter of great interest since 90s, particularly in the field of recent psychopharmacology. There is a consensus that improving subjective tolerability of psychotropic drugs is associated with better treatment compliance which leads to a greater degree of quality of life. However, relatively few papers have been published about the differential side effects impact of new psychotropic drugs (both antipsychotic and antidepressant medications) on quality of life. In this contribution, it will be firstly reviewed the different conceptual quality of life models for patients under psychopharmacological treatment, particularly antipsychotic drugs. Secondly, a comparative analysis will be made of the most frequently used instruments in clinical trials and of those specifically developed to assess the patient's point of view about the impact of psychotropic treatment. Finally, it will be discussed the results obtained from a carefully review of literature on the relationships between quality of life and side-effects of psychotropic medication, mainly neuroendocrine, extrapyramidal, different dismetabolic conditions and weight gain.

S44.05

Efficacy of quetiapine versus risperidone in the treatment of schizophrenia with predominantly negative symptoms

M. Riedel^{1,*}, H.-J. Möller¹, M. Strassnig², I. Spellmann¹, A. Müller-Arends¹, S. Dehning¹, N. Sadowsky¹, N. Müller¹. ¹*Department of Psychiatry and Psychotherapy, Munich University Hospital, Germany.* ²*Western Psychiatric Institute, University of Pittsburgh Medical Center, Pittsburgh, PA, USA*

Introduction: Although atypical antipsychotics are generally thought to be more effective than conventional agents in treating the negative symptoms of schizophrenia, there have been few direct comparisons. Therefore, we investigated the efficacy of risperidone and quetiapine ('Seroquel') against negative symptoms.

Methods: A 12-week, double-blind, parallel group comparison of risperidone versus quetiapine was conducted in 44 patients with schizophrenia with predominantly negative symptoms, as defined by Positive and Negative Syndrome Scale (PANSS) scores. The Scale for the Assessment of Negative Symptoms (SANS) was also used to evaluate efficacy. The Simpson-Angus Scale (SAS) compared the incidence of extrapyramidal symptoms (EPS). Assessments were performed at Weeks 1-8, 10 and 12. Data were analysed using a LOCF approach and MANOVA.

Results: Twenty-five patients completed the study. Both quetiapine (mean dose 574 mg/day) and risperidone (mean dose 4.91 mg/day) produced significant decreases in PANSS total, positive and negative scores, as well as SANS scores. No differences in efficacy were found, except for the SANS attention subscale, where a significant advantage of quetiapine over risperidone was observed

($p=0.05$). The tolerability profile of quetiapine proved to be advantageous in comparison to risperidone. Patients treated with risperidone had a significantly greater incidence of EPS ($p\leq 0.01$ at Weeks 3, 4, 5, and 7) and required significantly higher dosages of anticholinergic medications at Weeks 3-8 ($p<0.05$).

Conclusion: Quetiapine is as efficacious as risperidone against the negative symptoms of schizophrenia; however, quetiapine also improves attention and is better tolerated, with a lower incidence of EPS and anticholinergic medication requirement.

S44.06

Improvements of cognition functioning through atypical neuroleptics - are there differences?

H.-J. Möller*. *Department of Psychiatry, University of Munich, Germany*

Schizophrenia is a severe mental disorder characterized by a variety of signs and symptoms. Schizophrenic patients show deficits in many domains including attention, executive function, memory and language. There is increasing evidence that such deficits are specific and selective. Our knowledge about these processes reflect our growing understanding of schizophrenia from a neurocognitive prospective. The existence of specific patterns of cognitive dysfunction suggest several important avenues of future research and new therapeutic strategies. Several controlled studies have been conducted testing different neuroleptics, especially atypical neuroleptics, with respect to effects on cognition in schizophrenic patients. Most of these studies demonstrated the differences between risperidone and clozapine in this respect. Apparently the positive effect on cognitive disturbances is not the same among the atypical neuroleptics. For example, the possibly more favourable effect of risperidone found in some evaluations when compared with clozapine may be due to the lack of anticholinergic side effects of risperidone, which are capable of causing cognitive impairment.

S53. Symposium: Neurosteroid Modulation of Normal and Pathological Brain Functions: Experimental and Clinical Aspects

Chairpersons: Francesca Brambilla (Milan, Italy), Palmiero Monteleone (Naples, Italy)

10:30 – 12:00, Hall D

S53.01Ethanol-induced changes in GABA_A receptor plasticity and mesocortical dopamine function: Role of brain steroidogenesisG. Biggio*. *Centre of Excellence for the Neurobiology of Dependence, University of Cagliari, Italy*

The effect of endogenous 3 α ,5 α -THP on the modulation of mesocortical dopamine extracellular concentration by ethanol was investigated by microdialysis in rats. Intraperitoneal injection of progesterone (PROG) (5 mg/kg, once a day for 5 days) increased the cortical content of 3 α ,5 α -THP and potentiated the biphasic effect of acute intraperitoneal administration of ethanol on dopamine content. A dose of ethanol (0.25 g/kg) that was ineffective in naive rats induced a 55% increase in

dopamine extracellular concentration in rats pretreated with progesterone. This increase was similar to that induced by a higher dose (0.5 g/kg) of ethanol in naive rats. Administration of ethanol at 0.5 g/kg to PROG-pretreated rats inhibited dopamine content by an extent similar to that observed with an even higher dose (1 g/kg) in naive rats. Finasteride (25 mg/kg), a 5 α reductase inhibitor, prevented the effects of PROG, both on the cortical 3 α ,5 α -THP and on the modulation by ethanol of dopamine release. These data suggest that endogenous 3 α ,5 α -THP contributes to the action of ethanol on the mesocortical dopaminergic system. This conclusion is strongly supported by the evidence that, in isolated rat hippocampal tissue, ethanol increases the content of 3 α ,5 α -THP and the amplitude of GABA_A receptor-mediated inhibitory postsynaptic currents recorded from CA1 pyramidal neurons. This latter action is biphasic, consisting of rapid, finasteride-insensitive and delayed, finasteride-sensitive components. Given that finasteride inhibits 3 α ,5 α -THP synthesis our observations suggest that ethanol may modulate GABA_A receptor function through an increase in de novo neurosteroid synthesis in the brain.

S53.02

Neuroactive steroids in affective disorders and relation to antidepressant treatment

R. Rupprecht^{1,*}, E. Romeo². ¹Department of Psychiatry, Ludwig-Maximilians University, Munich, Germany. ²Tor-Vergata University, IRCSS Santa Lucia, Rome, Italy

Steroids influence neuronal function through binding to cognate intracellular receptors which may act as transcription factors in the regulation of gene expression. In addition, certain so called neuroactive steroids modulate ligand-gated ion channels via non-genomic mechanisms. Especially distinct 3 α -reduced metabolites of progesterone and deoxycorticosterone are potent positive allosteric modulators of gamma-aminobutyric acid type A (GABA_A) receptors. Animal studies showed that progesterone is converted rapidly into GABAergic neuroactive steroids in vivo. Progesterone reduces locomotor activity in a dose dependent fashion in male Wistar rats. Moreover, progesterone and 3 α -reduced neuroactive steroids produce a benzodiazepine-like sleep EEG profile in rats and humans. During major depression, there is a dysequilibrium of such 3 α -reduced neuroactive steroids which is corrected by successful treatment with antidepressant drugs but not by repetitive transcranial magnetic stimulation. Neuroactive steroids may further be involved in the treatment of depression and anxiety with antidepressants in patients during ethanol withdrawal. Studies in patients with panic disorder suggest that neuroactive steroids may also play a role in modulating human anxiety. Thus, neuroactive steroids may contribute to the pathophysiology of psychiatric disorders and the mechanisms of action of antidepressants and may represent a new treatment strategy for neuropsychiatric disorders.

S53.03

The neurosteroid modulation of normal and pathological anxiety in humans

F. Brambilla^{1,*}, G. Biggio², M. Serra², M.G. Pisu², G. Perini³, G. Zanoni³. ¹Department of Psychiatry, Hospital Sacco, Milan. ²Department of Experimental Biology 'B. Loddo', Cittadella Universitaria, Monserrato-Cagliari. ³Department of Psychiatry, Padova University, Italy

Neurosteroids, modulate anxiety in experimental animals by acting on GABA-A receptors in the CNS, but this has never been demon-

strated in normal humans. Impairments of neurosteroid secretion, however, have been reported in patients with anxiety disorders, suggesting that they might be involved in the development and course of the diseases, even though a significant correlation between the two phenomena has never been demonstrated. We have measured plasma concentrations of progesterone (PROG), pregnenolone (PREG) allopregnanolone (3 α , 5 α -THPROG), tetrahydrodeoxycorticosterone (3 α , 5 α -THDOC) and dehydroepiandrosterone (DHEA) in 58 psychologically and physically healthy men, and in 13 men and 25 women with Panic Disorder (PD) before and after 1 month of therapy with paroxetine (20 mg/day per os). In women, plasma neurosteroid concentrations were measured three times, in the early follicular, midluteal and premenstrual phases of the menstrual cycles. PD women had significantly higher than normal levels of PROG in the midluteal phases of the drug-free and the therapy months, of PREG and 3 α ,5 α -THDOC during the premenstrual phases of both months, of 3 α , 5 α -THPROG in the early follicular phase of the drug-free month and in the premenstrual phase of the therapy month. In PD men PROG and DHEA levels were significantly higher than in controls. In normal men and PD male patients PROG levels correlated positively with state anxiety, while in PD women DHEA and 3 α ,5 α -THDOC levels correlated negatively with anxiety and panic symptomatology. This suggests that neurosteroids might modulate anxiety in humans, both in normal and pathological conditions.

S53.04

Neurosteroids in eating disorders: Pathophysiological and clinical implications

P. Monteleone*, E. Castaldo, S. Longobardi, M. Pannuto, M. Maj. Department of Psychiatry, University of Naples SUN, Italy

Animal data suggest that neuroactive steroids, such as 3 α ,5 α -tetrahydroprogesterone (3 α ,5 α -THP), dehydroepiandrosterone (DHEA), and its sulfated metabolite (DHEA-S), are involved in the modulation of eating behaviour, aggressiveness, mood, and anxiety. Anorexia nervosa (AN) and bulimia nervosa (BN) are eating disorders characterized by abnormal eating patterns, depressive and anxious symptoms, enhanced aggressiveness, and endocrine alterations. Previous studies reported decreased blood levels of DHEA and DHEA-S in small samples of anorexic patients, whereas no study has been performed to evaluate the secretion of all these neuroactive steroids in BN as well as the production of 3 α ,5 α -THP in AN. Therefore, we measured plasma levels of DHEA, DHEA-S, 3 α ,5 α -THP and other hormones in patients with AN or BN and in healthy women, and explored possible relationships between neuroactive steroids and psychopathology. Ninety-two women participated in the study. There were 30 drug-free AN patients, 32 drug-free BN patients, and 30 age-matched, healthy control subjects. Blood samples were collected in the morning for determination of hormone levels. Eating-related psychopathology, depressive symptoms, and aggressiveness were rated by using specific psychopathological scales. Compared with healthy women, both AN and BN patients exhibited increased plasma levels of 3 α ,5 α -THP, DHEA, DHEA-S, and cortisol, but reduced concentrations of 17 β -estradiol. Plasma levels of neuroactive steroids were not correlated with any clinical or demographic variable. These findings demonstrate increased morning plasma levels of peripheral neuroactive steroids in anorexic and bulimic patients. The relevance of such hormonal alterations to the pathophysiology of eating disorders remains to be elucidated.

S53.05

GABA-steroids in the pathogenesis of stress and sex-steroid related disorders

T. Bäckström*. *Department of Clinical Science, Umeå Neurosteroid Research Center, University of Umeå, Sweden*

Neuroactive steroids are a large group of steroids having effect in the brain and on brain function. The steroids mostly studied are allopregnanolone (AP), tetrahydro-desoxycorticosterone (THDOC), pregnenolone-sulfate (PS) dihydroepiandro-steronesulfate (DHAS) and estradiol (E2). AP and THDOC are called GABA-steroids as they are positive modulators of the GABA-A receptor in a similar way as benzodiazepines (BZ), barbiturates (BARB) and alcohol. AP is produced within the brain, by the adrenals at stress and from the ovary during the menstrual cycle, THDOC from the adrenals. They have similar behavioral effects as BZ and BARB but also their adverse effects. Animal and human studies show that BZ, BARB, alcohol and AP have a bimodal effect on behavior. In high dosages or concentrations the positive GABA-A receptor modulators are CNS depressants, anesthetic, antiepileptic and anxiolytic. In low concentrations, reached endogenously, they can induce adverse emotional reactions in up to 30% of individuals. AP can induce tolerance to itself and other similar substances and a rebound occur at withdrawal. Some stress and menstrual cycle linked mood disorders can be understood in the concept that they are caused by the action of endogenously produced THDOC or AP through three possible mechanisms: a) direct action, b) tolerance induction, and c) withdrawal effect. Examples of symptoms and disorders related to GABA-steroid action are stress and menstrual cycle linked mood changes, sedation, tiredness, memory disturbance, learning disturbance, disturbance of motor function, clumsiness, increased appetite and food cravings, worsening of Petit Mal epilepsy, negative mood as tension, irritability and depression.

W01. Workshop: Evaluation of Psychotherapeutic Interventions in Childhood

Chairperson: Bertrand Cramer (Geneva, Switzerland)
10:30 – 12:00, Hall E

W01

Evaluation of psychotherapeutic interventions in childhood

B. Cramer, C. Robert-Tissot, S. Rusconi-Serpa. *Departement de Psychiatrie, Service de Psychiatrie de l'enfant et de l'adolescent, Geneva, Switzerland*

Mother-infant psychotherapy. Results of these researches will be briefly presented. Then a Follow-up Study was conducted when the study cases were 11years old. We will present the most striking results of the Follow-up: what happens in time to symptoms, to I.Q. and to diagnoses. A general discussion will address the problems of diagnosis in early childhood, of continuity and discontinuity, of correlations between early features and data revealed at Follow-up.

W05. Workshop: Genetics, Psychopathology and Psychopathological Phenotypes

Chairpersons: Willem Verhoeven (Venray, The Netherlands), Siegfried Tuinier (Venray, The Netherlands)
10:30 – 12:00, Hall F

W05

Behavioural and psychopathological phenotypes

L.M.G. Curfs², S. Tuinier¹, W.M.A. Verhoeven¹. ¹*Vincent Van Gogh Institute for Psychiatry, Venray.* ²*Department of Clinical Genetics, Research Institute Growth and Development, Maastricht, The Netherlands*

Quantitative and molecular genetics have made an enormous progress over the last three decades. Although several so called behavioural phenotypes have been described, only a few pathways between genes and behaviour have been unravelled. The original concept of Nyhan in 1972 that was modified by Flint and Yule in 1994 states that a behavioural phenotype is defined as a characteristic pattern of motor, cognitive, linguistic and social abnormalities which is consistently associated with a biological disorder. In some cases, a behavioural phenotype may constitute a psychiatric disorder in which case the term psychopathological phenotype is the most appropriate. The general model of behavioural phenotypes is however complicated by a variety of interfering factors. First, it is generally known that no psychiatric symptom is specific for a psychiatric disorder and that the psychiatric taxonomy is only descriptive and tentative. Furthermore, a distinction should be made between a functional impairment and the secondary symptomatological and social consequences. Second, comparable psychiatric symptoms may emerge in very different genetic syndromes which questions the specificity as included in the definition. Third, phenotypical variability is the rule which makes the gene-behaviour connection probabilistic. In addition, a limited number of known disorders consists of a single gene defect. Finally, the prevalence of a syndrome has its impact on the certainty with which a relationship can be demonstrated. In this presentation recent findings in this field and their relevance for neuropsychiatric phenotypes will be discussed.

Free Communications: Psychotic Disorders III

10:30 – 12:00, Hall G

Dysphoric mood in patients at high risk of psychosis

M.C. Klaassen¹*, D.H. Nieman², H.E. Becker², P.M. Dingemans², D.H. Linszen². ¹*Rijgeestgroep, Child and Adolescent Psychiatry, Leiden.* ²*AMC/De Meren, Psychiatry, Amsterdam, The Netherlands*

Affective symptoms are prevalent in subjects at high risk of developing psychosis. The current study investigated prevalence of dysphoric mood in a group of patients at high risk of developing psychosis. The current study is part of EPOS (European Prediction

of Psychosis study). 21 high risk subjects were interviewed with the Structured Interview for Prodromal Symptoms (SIPS). 57% of the high risk patients experienced dysphoric mood. Thus, 12 of the 21 patients experienced dysphoric mood with a score of 3 or more on the item Dysphoric mood of the SIPS. Higher total score on the SIPS was related to more severe dysphoric mood ($r=0.59$, $p<0.005$). Impaired tolerance to normal stress was also related to dysphoric mood ($r=0.55$, $p<0.006$). A high percentage of patients that has a high risk of developing psychosis within a year suffers with dysphoric mood. Severity of symptoms (as assessed with the total SIPS score) is related to dysphoric mood. Subjects with a high score on the item dysphoric mood also experienced impaired tolerance to normal stress. Only two of the high risk subjects had been treated with antidepressive medication either in the past or at time of investigation. 40% of the high risk subjects are expected to develop a psychotic episode in the near future. Implications and options for assessing and valuing depressive symptoms in high risk subjects will be discussed.

'Strangeness' of people with schizophrenia: Causes antipsychotic medication stigma or does it help to destigmatize?

A.E. Baumann*, W. Gaebel. *Department of Psychiatry, Heinrich-Heine-University, Düsseldorf, Germany*

'Strangeness' of people with schizophrenia causes antipsychotic medication stigma or does it help to destigmatize? Illness-related behaviour of schizophrenic patients, i.e. behaviour because of positive and negative symptoms of the disorder, in the public often is perceived as 'strange' and deviant from social norms and expectations. Positive symptoms are associated with the perception of 'madness' and dangerousness, others often misinterpret negative symptoms as a sign of laziness and lack of interest. Also side-effects of antipsychotic medication can be responsible for more stigma than the disorder itself. Studies show, that especially negative symptoms are associated with the perception of 'strangeness' of people with schizophrenia and that 'strangeness' is the main predictor of social distance towards them. The question, whether antipsychotic medication can help to reduce the stigma and patients' and the public's views on that will be discussed.

Gestalt perception changes in psychosis: Results from a controlled psychophysical study

W. Tschacher*, D. Schuler. *University Hospital of Social and Community Psychiatry, Bern, Switzerland*

Background: The general hypothesis of this empirical study was that schizophrenia spectrum patients show an impairment of their capabilities to generate and/or retain perceptual/cognitive patterns ('gestalts') compared to nonpatient controls. The secondary hypothesis was that such impairments correlate with psychotic symptoms. A further assumption concerned the patients' ability of 'intersensory binding', i.e. how different sensory modalities (e.g. auditory and visual stimuli) are integrated into a coherent perceived scene; a mixing of sequential information from different sources was expected that may characterize psychotic information processing.

Methods: Computer-based psychophysical tasks were implemented that provoked various gestalt illusions such as apparent motion and motion-induced blindness. The stability of gestalt per-

ception was then measured by the duration of these phenomena and by the hysteresis effect. Intersensory binding was operationalized by assessing the effect acoustic stimuli have on Michotte-like motion perception. We tested $N = 32$ schizophrenia patients (81% males; mean age 27.2 years) and 32 control subjects matched with respect to age, sex, and educational background.

Results: Patients tended to perceive longer durations of gestalt phenomena (higher perseveration) in circular apparent motion, whereas gestalt perception (hysteresis) was generally unimpaired. An association between PANSS scores and gestalt phenomena was found. Patients showed markedly decreased binding capabilities. These specific findings add to the growing evidence for altered perceptual organization in schizophrenia.

Spirituality and religious practices among people suffering from schizophrenia in ambulatory care in Geneva

S.M. Mohr*, P. Huguelet. *Département de Psychiatrie, Hôpitaux Universitaires de Genève, Switzerland*

Background: Based on the bio-psycho-social model of schizophrenia, the treatment focuses on antipsychotic medication, strategies of coping and social rehabilitation, however this approach doesn't take into account spirituality. The aim of this study is to assess spirituality and religious practices of people with chronic schizophrenia, their caregivers' representations and relationships with symptoms, coping, comorbidity, compliance and social functioning.

Method: 100 outpatients will be randomly included for a semi-structured interview.

Preliminary results: Among the first 54 patients interviewed, 33% were highly involved in a religious community, spirituality was very important in their life and helped them to cope with their illness; 31% were not involved in a religious community but had spiritual practices every day, two-third of them used spirituality at a large scale to cope; 15% practiced from time to time, and 20% never. Subjects were mainly Christians (67%), 15% from other religions, 7% without religion and 11% developed idiosyncratic beliefs. Even if caregivers knew about the religious involvement for two third of committed patients, they largely underestimated spiritual coping strategies.

Discussion: Spirituality appears to remain a 'taboo subject' in psychiatry, because usually caregivers know about it only when the patients initiate the subject, even if almost all patients and caregivers declare to be at ease to speak about it.

Conclusion: By the fact that the rate of religious and spiritual involvement of people coping with schizophrenia is high, its positive and negative effects appear to be necessary to clarify for a deeper understanding of pathology and to improve treatments.

Quality of life and risperidone or olanzapine prescriptions: What do the patients say?

R. Tempier^{1,*}, B. Mc Grath². ¹*Department of Psychiatry, McGill University, Montreal General Hospital, Montreal, QC.* ²*Psychopharmacology and Bebensee Schizophrenia Research Unit, University of Alberta, Edmonton, AB, Canada*

Satisfaction with medication treatment, for patient with schizophrenia strongly influences treatment compliance (Kalman 1983) and outcome, especially quality of life (Awad 1992). We report here the results from an outcome survey comparing opinions of 2 groups of

patients either prescribed olanzapine (OLZ) or risperidone (RISP) as their only antipsychotic medication.

Methods: This survey took place in a specialized outpatient clinic of a teaching hospital servicing patients with long-term psychoses. Forty patients either on OLZ or RISP were chosen randomly and in-depth interviewed with several outcome questionnaires including the modified version of the Sickness Impact Profile (Awad, 1995).

Results: On average, patients were 43 years old, male (67%), single (75%), living alone (45%). Most have a diagnosis of schizophrenia (77.5%) or schizo-affective disorder (17.5%). No demographic or clinical differences were found between the 2 groups. Mean dose of OLZ was 15mg, RISP 4.2mg. Overall, patients reported little sickness-related dysfunction. SIP sub-scales showed that more OLZ vs. RISP patients (60% vs. 20%) reported going out less to visit people. More OLZ vs. RISP patients (75% vs. 20%) were more inactive. Interestingly, 80% of OLZ patients reported that their sexual activity had decreased, compared to only 40% on RISP. So, patients' opinions are slightly different than the literature. This study's limitations are due to the small sample size and the cross sectional nature of the design. Future studies should expand on these findings with the final goal of incorporating the assessment of subjective measures of outcome into routine clinical practice.

Personality and psychosis: Subjective experiences, self-centrality and schizotypal dimensions in 1st degree relatives of schizophrenics

A. Raballo*, C. Maggini. *Psychiatry Section, Department of Neuroscience, Parma University, Italy*

Meehl's (1962) seminal framework for explicating the interplay of genetic predisposition and environmental factors in the etiology of schizophrenia, conceptualized schizotaxia as the 'neural integrative defect' produced by the genetic liability for schizophrenia. However, contextual to the personological expression of schizotaxia, subtle and elusive disturbances of the tacit naturalness of subjective experience (i.e. Basic Symptoms (BS)) are likely to stem out (as autopsychic byproducts) from the same liability to schizophrenia (Huber 1983). Indeed, Basic symptoms are considered the primary phenomenological aspects (i.e. the subjective side) of the schizophrenic disturbances of information processing, related to the neurobiological substrate of the disease (Huber 1983). The present work investigates the experiential correlates of the three dimensions of schizotypy (i.e. cognitive-perceptual, interpersonal and disorganized) in 68 healthy first degree relatives of schizophrenia patients. Specific associations were found between the cognitive-perceptual schizotypal domain and 'impaired bodily sensations', whereas the interpersonal dimension was related to 'impaired tolerance to normal stress' and 'thought, language, perception and motor disturbances'. Finally, both cognitive-perceptive and interpersonal schizotypal dimensions were correlated with basic self-centrality (i.e. sub-delusional intermittent feeling of self-reference). The concomitant exploration of personological (i.e. schizotypy) and experiential (i.e. Basic Symptoms) vulnerabilities may be a fertile heuristic to enrich the investigation of schizotaxic liability and points to the inclusion of subjective experiential anomalies in the current characterization of the schizotaxic phenotype.

References

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S37. Symposium: Mental Health at Work Place in Low Income Countries

Chairpersons: Tsuyoshi Akiyama (Tokyo, Japan),
 Walter Gulbinat (Lichtenstein, Germany)

10:30 – 12:00, Hall H

S37.01

Crossing the quality chasm to improved societal assistance programs in developing countries

R.W. Manderscheid¹, R. Beinecke^{2*}. ¹*Center for Mental Health Services, U.S. Department of Health and Human Services, Rockville, MD, USA.* ²*Suffolk University, Suffolk, UK*

The U.S. Institute of Medicine has recently outlined a new approach to transformation of the American health care system. This approach is described in a recent report, 'Crossing the Quality Chasm'. It includes definition of a framework of goals, principles, and strategies to be employed for the needed transformation. The presentation will apply this new framework to the problem of developing society-wide assistance programs in developing countries. Application of the framework will help to clarify and define the strategies and tactics necessary to initiate development of these assistance programs. A key principle in all of this work is that care needs to be patient and family centered, with the implication of a strong indigenous infrastructure and peer support in its development.

S37.02

Impacts of socio-economic changes to the worker's mental health in Asia and Pacific

N. Shinfuku*. *International Center for Medical Research, Kobe University, Kobe, Japan*

In the past decades, there have been rapid socio-economic changes in Asia and Pacific. These changes have been beneficial to general health conditions such as the decrease of infant mortality and the increase of healthy life span. Urban life style, technological development, easy transport, industrial developments are positive sides of socio economic development. However, they have brought several new mental health problems. They includes, among others, alcohol related problems, drug abuse, depression and suicides. In some Pacific islands, suicide rate among young male increased almost 10 times from 1960 to 1980. In China, the drug abuse which started at the later 1980s in Southern Province, is now wide spread all over the country. The number of drug addicts is estimated more than 1million. Alcohol has become a major social issue in many parts of the Pacific and Mongolia. Counter measures are almost non-existent. There are not many mental health workers to provide services to the

victims. It is more important to develop comprehensive program for the prevention. Many governments are not well equipped to plan national policies and programs to reduce harmful effects. There are much to do for multi-national industries to collaborate with the Government, local industries and local communities to reduce mental health problems in low income countries. In fact, many problems originated from industrialised countries. Reckless exports of alcohol beverage, demand for illicit drugs, work addicts are all the products of highly developed countries.

S37.03

Adaptation of employee assistance programmes to the needs of developing countries

W. Gulbinat*. *Global Forum for Health Research, Lichtenstein, Germany*

An increasing number of enterprises in industrialized countries recognize that the neglect of mental and neurological health and psychosocial factors at the workplace is not only detrimental to the individual workers, but also directly affects efficiency, effectiveness and output of the enterprise. As a consequence, a number of initiatives, including attention to Management practices, Education and Training Programs, and Employee Assistance Programs (EAPs) are being developed, particularly in large enterprises as a way of providing support to individuals. Programs with a focus on mental health, mental and neurological disorders and substance abuse in the workplace are practically non-existent in developing countries. This fact not only hampers the competitiveness of enterprises in such countries at a time when globalization exposes more and more companies to international competition. It also becomes a human rights issue when the quality of life of the working population, their families, and the communities in which they live are unnecessarily put at risk. Enterprises operating multinationally are starting to adapt EAPs developed in their head offices in industrialized countries to the situation in low-income countries where they have subsidiaries. This, however, is not without problems as the socio-cultural settings in low-income countries are very different from those of the countries where the EAPs or other programs were originally developed. An international multicenter collaborative research project is presented aimed at adapting approaches used in industrialized countries to mental health policy and practice in the workplace to the needs of low- and middle-income countries and different socio-cultural contexts.

S37.04

Japan Study

T. Akiyama*. *Department of Neuropsychiatry, Kanto Medical Center, Tokyo, Japan*

In Japan, currently little data is available regarding the issues in the workplace of mental health, psychiatric and neurological disorders and substance abuse of the workers of the corporations in low-income countries. There are few Japanese corporations that have programs with focus on mental health in the workplace. On the other hand, there is a unique approach in Japan for the mental health rehabilitation in the workplace. This program is called Rework Assist Program. It is different from EAP of western concept in that the program includes not only psychotherapy but also work rehabilitation. This program may be adaptable to mental health policy and practice at the workplace in low-income countries with different

socio-economic-cultural contexts from the west. Also in Japan there is a new investigation on the issue of workplace stress and temperament. Temperament, as basis of personality, seems to influence considerably the workplace stress. Thus it is recommended to take into consideration this factor in creating the programs for multinational corporations. It may help improve the mental health care in low-income countries, if the interested professionals from these countries come to Japan to learn these approaches.

S85. Symposium: Velo-cardio-facial syndrome (deletion 22q11.2): A Developmental Model for Understanding the Relation between Genes, Brain, Cognition and Schizophrenia

Chairpersons: Stephan Eliez (Geneva, Switzerland), Kieran Murphy (Dublin, Ireland)
10:30 – 12:00, Hall I

S85.01

What does MRI brain imaging tell us about structural alterations associated with the velo-cardio-facial cognitive and psychiatric phenotype

S. Eliez^{1,*}, M. Debbané¹, B. Glaser¹, V. Braissant¹, J. Delavelle², F. Lazeyras². ¹*Division of Child and Adolescent Psychiatry.* ²*Department of Radiology, Geneva University School of Medicine, Geneva, Switzerland*

Clinical studies indicate that twenty to thirty percent of children and adolescents with velo-cardio-facial syndrome (VCFS), resulting from a microdeletion on 22q.11.2, will develop schizophrenia. This presentation aims to demonstrate whether neuroanatomical features in VCFS are similar to those reported in the schizophrenia literature by specifically measuring the volumes of lobes, superior temporal gyrus (STG), and mesial temporal structures in a sample of affected children and adults. Differences in cortical gyration will also be presented. Measures of brain volumes and structure will be associated with variable cognitive and clinical measures. 25 children and adults with VCFS and 25 controls, matched for age and gender, received magnetic resonance imaging scans. ANCOVA models were used to compare regional brain volumes. Voxel-by-voxel analysis are used to investigate correlation between brain structure and the neurobehavioral phenotype associated with VCFS. Correlations between residualized brain volumes and dependent variables are standardized and compared using the Fisher r-to-z transformation. Abnormal patterns of brain development are concordant with MRI findings in the schizophrenia literature. Parietal, temporal lobe and mesial temporal structures may represent a shared substrate for the effects of the 22q11.2 deletion and for the complex etiological pathways that lead to schizophrenia and the endophenotype associated with the disorder.

S85.02

Psychiatric problems in children, adolescents and young adults with velo-cardio-facial syndrome

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The psychiatric problems associated with VCFS are of particular interest to clinicians and clinical researchers alike, partly because of the need to provide effective treatments to individuals with this disorder, but also because of the opportunity to study gene-behavior relationships in the context of a known unilateral genetic deletion. Numerous studies have documented a high rate of attention problems, depression, bipolar mood symptoms, obsessive-compulsive disorder, and anxiety symptoms at various stages of childhood and adolescence in individuals with VCFS. Furthermore, it has been clearly established that VCFS greatly increases the risk for both childhood and adult-onset schizophrenia. There are also a mounting number of anecdotal reports suggesting that some individuals with VCFS have social deficits consistent with a pervasive developmental disorder. Despite the plethora of clinical findings, it has been difficult to demonstrate a single consistent behavioral phenotype for VCFS. This is partly due to the great variety of psychiatric symptoms found, the considerable variability in type and severity of these symptoms between patients, and the change in symptoms over the developmental span from early childhood to adulthood. It is not yet clear how much of the variability in psychiatric disorder is due to psychosocial risk factors associated with developmental disability, how much is due to the influence of other genetic factors unrelated to the 22q11.2 deletion differences between individuals with VCFS, and how much is due to allelic heterogeneity for at least some genes (particularly the COMT allele) at the 22q11.2 site on the non-affected chromosome 22. In this presentation, we review the most common clinical findings at various stages of development, highlight common themes and suggest possible syndromic subtypes for further systematic studies.

S85.03

An exploration of verbal short-term memory processing in children presenting a velo-cardio-facial syndrome

S. Majerus^{1,*}, B. Glaser², M. Van Der Linden³, S. Eliez². ¹*Department of Cognitive Sciences, University of Liege, Belgium.* ²*Division of Child and Adolescent Psychiatry, Geneva University School of Medicine.* ³*Department of Psychology, Geneva University, Switzerland*

The present study explored verbal short-term memory (STM) processing in velocardiofacial syndrome (VCFS), a rare neurodevelopmental disorder linked to a deletion on chromosome 22q11.2. Using a multiple case study design, we presented a series of STM tasks exploring immediate serial recall (ISR) for word and nonword sequences to 8 children with VCFS (aged 8-12 years) and to chronological age-matched control groups. We assessed the integrity of phonological coding in verbal STM, by comparing ISR for phonologically similar and dissimilar words. The influence of language knowledge on STM was investigated by comparing ISR for words of high vs. low image ability words, for words of high vs. low lexical frequency, and for words vs. nonwords. A final task assessed short-term serial order recognition for digit sequences. When computing the number of items recalled in the different word and nonword ISR tasks, independently of their correct serial position, only one patient presented consistent difficulties for word ISR. Nonword ISR was normal in each patient. Phonological similarity and verbal

knowledge also influenced STM performance to a similar extent as in controls. However, when applying a strict serial recall criterion, difficulties were observed in the word and nonword ISR tasks for most patients. Half of the patients were also impaired in the serial order recognition task. The results suggest that, despite mild mental retardation, short-term retention capacities for verbal item information can be at a chronological age appropriate level in VCFS. However, STM for serial order information may be specifically impaired.

S85.04

What can velo-cardio-facial syndrome tell us about the genetics of schizophrenia?

K.C. Murphy^{1,*}, H.J. Williams², M.J. Owen², M.C. O'Donovan². ¹*Department of Psychiatry, Royal College of Surgeons in Ireland, Dublin, Ireland.* ²*Department of Psychological Medicine, University of Wales College of Medicine, Cardiff, UK*

Velo-cardio-facial syndrome (VCFS), the most frequent known interstitial deletion found in man, is associated with chromosomal microdeletions in the q11 band of chromosome 22. Although considerable phenotypic variability occurs, VCFS individuals have high rates of psychiatric disorder, particularly schizophrenia. In addition, an increased prevalence of chromosome 22q11 deletions has been reported in populations of people with schizophrenia. Furthermore, molecular genetic studies have suggested that a schizophrenia susceptibility locus maps to chromosome 22q. These data suggest that aside from being the child of two parents with schizophrenia or the monozygotic co-twin of an affected individual, VCFS and deletion 22q11 represents the highest known risk factor for the development of schizophrenia identified to date. The gene encoding catechol-O-methyltransferase (COMT) maps to the VCFS deleted region and is a prime candidate gene for psychosis in VCFS. COMT contains a codon 158 (Val/Met) polymorphism which determines high and low activity of this enzyme. Recently, Shifman and colleagues (2002) reported highly significant associations between schizophrenia and COMT haplotypes constructed from the Val/Met polymorphism and two non-coding SNPs. We failed to find evidence for association between schizophrenia and either the Val/Met polymorphism or COMT haplotypes in VCFS individuals. Consequently, it does not appear that COMT is a major determinant for the high rates of psychosis seen in VCFS individuals.

S06. Symposium: Antidepressants plus Cognitive Therapy: Increased Efficacy?

Chairpersons: Hans-Jürgen Möller (Munich, Germany), Eugene S. Paykel (Cambridge, UK)
14:15 – 15:45, Hall A

S06.01

Methodological problems in the evaluation of combined pharmacological and psychotherapy in depression

H.-J. Möller^{1,*}, M. Hautzinger², E.S. Paykel³, U. Hegerl¹. ¹*Psychiatric Department, University of Munich, Germany.* ²*Psychological Department, University of Tübingen, Germany.* ³*Department of Psychiatry, University of Cambridge, UK*

The investigation of the comparative efficacy of the combination of pharmacotherapy and psychotherapy versus either modality alone or versus the combination of both has to consider several methodological issues. Neglect of these methodological aspects can lead to severe pitfalls. Also, the interpretation of the results of such studies should be performed very carefully, considering several aspects.

Among others, the following questions have to be addressed:

- Was the study performed in a more psychopharmacology-oriented or more psychotherapeutically-oriented institution?
- Were the patients acutely or chronically ill?
- Were the patients already refractory to pharmacotherapy or psychotherapy prior to inclusion in the study?
- Was the pharmacotherapy performed according to the state of the art?
- Was the psychotherapy performed according to the state of the art?
- Was the pharmacotherapy administered in the context of a pseudo placebo control group?
- Was the sample size adequate for a confirmative trial?
- Etc.

Some recent studies will be analysed under these aspects. Generally it has to be taken into consideration that it is much more difficult to prove efficacy of a combination therapy versus an active mono-therapy than to prove efficacy of a mono-therapy or combined-therapy versus placebo.

S06.02

Antidepressants and cognitive therapy in the treatment of acute depression

M. Hautzinger*. *Department of Psychology, Clinical and Physiological Psychology, Eberhard Karls University, Tübingen, Germany*

Cognitive therapy is a well established psychotherapy for depression. It shows benefits to lift acute depressive states, it has long-term effects, and prevents relapses and recurrence of depressive episodes. This presentation will focus on several recent studies administering cbt in the treatment of acutely depressed subjects. The depressed subjects are treated either as in-patients or as out-patients, in a group setting or individually. The short- and long-term effects of cbt are compared with antidepressants and with the combination of cbt and antidepressants. This presentation will also address the issues of depression severity, age of patients, prediction of response as well as prevention.

S06.03

Cognitive therapy with antidepressants in residual depression

E.S. Paykel*. *Department of Psychiatry, University of Cambridge, UK*

This paper will present findings from a controlled trial of cognitive therapy for relapse prevention in depression, recently extended to a six year follow-up. 158 subjects with residual symptoms after major depression were randomised to receive 20 weeks cognitive therapy together with antidepressant and clinical management or antidepressant and clinical management alone. Antidepressants were continued at comparatively high dose to 68 weeks. Findings of the original trial showed significant relapse and recurrence prevention with small effects on residual symptoms, some benefit to social adjustment and a cost of approximately £4300 ([0080]6000) per

relapse avoided. The study has now been extended to approximately 6 years beyond randomisation with successful follow-up of 90% of subjects. Recurrence prevention was found to persist for some time, and there was also lessening of residual symptoms until this point. This study is now one of several showing significant relapse and recurrence prevention by cognitive therapy in unipolar depression, and the first large sample study to indicate duration of effects. The findings suggest the potential benefit of a booster course around two years after completion of the primary course.

S06.04

MIND-study: Antidepressants and cognitive therapy in mild depression

U. Hegerl^{1,*}, V. Henkel¹, M. Hautzinger², M. Schütze¹, W. Scheunemann¹, R. Kohnen³. ¹*Department of Psychiatry, Ludwig-Maximilians-Universität, Munich.* ²*University of Tübingen.* ³*CRO IMREM, Nuremberg, Germany*

Mild and minor depression are prevalent in primary care settings. Evidence concerning efficacy of antidepressant treatments comes mainly from study results which cannot be generalized to depression in primary care. Using broad inclusion criteria, a randomized, placebo-controlled five-arm study including a patient preference arm was performed on primary care patients with mild and minor depression. Results will be presented regarding an interim analysis on 250 patients.

S12. Symposium: The Other Side of Schizophrenia Treatment

Chairpersons: Wolfgang W. Fleischhacker (Innsbruck, Austria), Wulf Rössler (Zurich, Switzerland)
14:15 – 15:45, Hall B

S12.01

Subjective experiences of the effects of antipsychotics

D. Naber*. *Department of Psychiatry and Psychotherapy, Hamburg, Germany*

Only recently, and strongly related to the development of atypical antipsychotics, success criteria became more ambitious and include a more thorough consideration of negative symptoms and cognitive dysfunction, both of major importance for long-term prognosis. The most important change within the last decade is the long overdue consideration of the patient's perspective. Several trials showed that most schizophrenic patients, if no longer acutely psychotic, are able to reliably assess their affective state, subjective well-being or quality of life. These important outcome criteria are most often unchanged or even reduced under treatment with typical neuroleptics, but markedly improved by atypical antipsychotics. Numerous data indicate that the psychiatrists' and patients' perspectives regarding quality of antipsychotic treatment differ strongly. Patients are more sensitive to detect the advantages of atypical antipsychotics. For 20 years, the only atypical antipsychotic was clozapine. Now, with amisulpride, risperidone, olanzapine, quetiapine and ziprasidone, a variety of other atypicals is available. Due to their major pharmacological differences, their side effect profile varies considerably. Weight gain, sedation, sexual dysfunction etc. are to be considered. Efficacy and tolerability

of previous antipsychotics, psychopathology, profession and, particularly, the individual vulnerability or coping abilities regarding different side effects are important and should be thoroughly explored. This information is of major relevance when considering patients' attitude, particularly regarding compliance during long-term treatment. The difficult decision which atypical antipsychotic might be best for the individual patient requires good knowledge of both the drugs and the patient, careful listening to his subjective reactions and a trusting therapeutic alliance.

S12.02

Attitudes towards drug treatment in schizophrenia

M. Hummer*. *Department of Biological Psychiatry, Innsbruck University Clinics, Austria*

As shown in several studies adherence to drug treatment is influenced by several factors including patient-related, illness-related, physician-related, treatment-related influences and psychosocial environment-related influences. Attitudes towards drug treatment is a patient related factor, that have been identified as one of the most important factors influencing compliance. A useful perspective for understanding how patients' beliefs and attitudes can affect compliance is provided in the health belief model. This concept proposes that patients weigh the perceived benefits of the treatment against its perceived risks and will comply with the instructions if they believe the benefits exceed the risks. Furthermore, unpleasant and negative subjective response have been shown to have a negative impact on the patients attitude towards drug treatment and their readiness to take the medication as prescribed. Therefore, if side effects emerge, an immediate management should ensure a relative freedom of side effects to enhance levels of satisfaction with medication and perceived well-being. In addition, the information given by mass media regarding treatment of psychiatric disorders, cost effectiveness discussions and readiness of the insurance companies to pay for the medication influence not only patients but also the attitude of significant others, staff members and even the attitude of the treating physician. Such information will influence their motivation either to help the patient to adhere to drug treatment or to support their decision to stop medication. Therefore, a regular assessment of patients attitudes towards drug treatment is an inevitable prerequisite to improve compliance in daily clinical life.

S12.03

Psychiatric staff attitudes towards mentally ill

W. Rössler*, C. Lauber. *Psychiatric University Hospital, Zurich, Switzerland*

Stigma affects different life domains of the mentally ill – e.g., interpersonal relationships, housing, employment, and recovery from mental illness – causing social exclusion and isolation for those afflicted. Thus, an important goal of mental health research is to reveal ways to reduce stigma. Among others, stigmatisation is represented in negative attitudes towards people with mental illness. Thus, changing these attitudes is a possible option when aiming at decreasing stigma. Most research focused so far on public's attitudes as a source of stigmatisation. But public's attitudes are difficult to influence. Therefore, other sources of stigmatisation such as attitudes of 'significant others' must be considered. However, before this can be obtained it is crucial to understand contributing factors of stigma. We, thus, conducted an representative opinion

survey on attitudes towards mental illness among psychiatric in- and outpatient staff, i.e. nurses, psychiatrists, psychologists, vocational workers etc. Among others, we asked to indicate their attitudes towards restrictions, e.g., compulsory admission, on mentally ill people. Moreover, based on a vignette depicting a person either with schizophrenia or depression according to DSM-III-R we asked the interviewees to indicate their willingness to interact with the described person, i.e. to reveal their social distance. According to our understanding that attitude depends on different levels, we included demographic, psychological, and sociological concepts in our study. Additionally, Switzerland comprises three major language areas, each influenced by its respective cultural context, i.e. the German, Italian, and French, offering the possibility to additionally evaluate cultural influences. First results will be presented.

S12.04

Attitudes of the general public, mental health professionals and patients' relatives concerning the management of schizophrenia

L. Magliano*, A. Fiorillo, C. De Rosa, C. Malangone, M. Maj. *Department of Psychiatry, University of Naples SUN, Italy*

This study explored the beliefs about the management of schizophrenia in a sample of 714 lay respondents, 465 mental health professionals, and 709 key-relatives of patients with this disorder. The survey was conducted in 30 randomly selected Italian geographic areas, based upon location and population density. The data were collected by the Questionnaire about Opinions on Mental Illness (QO). Thirty-four percent of the lay respondents, 20% of the professionals and 68% of the relatives stated that schizophrenia is exclusively due to psychosocial factors. Concerning treatments, the general public sample had beliefs more similar to those expressed by professionals than to those reported by relatives. While 25% of the general public sample and 28% of professionals were totally convinced of the usefulness of drugs to treat schizophrenia, this percentage was significantly higher among relatives (48%). The beliefs of the general public differed from those of professionals and relatives as concerns the usefulness of psychosocial interventions, acknowledged by 58% of the lay respondents compared with 44% and 46% in the other two samples, and the patients' possibility to recover, completely admitted by 35% of general population compared to 2% of professionals and 17% of relatives, respectively. 35% of lay respondents and of patients' relatives, and 18% of professionals were totally convinced that psychiatric patients are unpredictable. These results suggest that the general public needs to be better informed about the main characteristics, available treatments and risk of dangerous behaviours in schizophrenia.

S09. Symposium: New Therapeutic Strategies in the Treatment of Postpartum Disorders

(Organised by the AEP Section on Women's Mental Health)

Chairpersons: Anita Riecher-Rössler (Basel, Switzerland), Antti Ahokas (Helsinki, Finland)
14:15 – 15:45, Hall C

S09.01

Depression in the postpartum period - a diagnostic and therapeutic challenge

A. Riecher-Rössler*. *Psychiatrische Universitätspoliklinik, Kantonsspital Basel, Switzerland*

Depression in early motherhood confronts us with specific diagnostic and therapeutic challenges. On the one hand, diagnosis is especially difficult, as, due to shame, stigma and fears, but also due to practical obstacles, women do not seek help. Furthermore, due to misinterpretation of symptoms, doctors do not always recognize the severity of the situation. On the other hand, if untreated, these disorders can have especially severe consequences, not only for the mother, but also for the child and the whole family. These disorders therefore need our special attention and treatment. This means modifications of our pharmacological, non-pharmacological and psychotherapeutic treatment methods and also provision of new low-threshold mother- (father-) infant services. To relieve the patients from feelings of guilt and to establish and maintain a good mother-infant bonding are of utmost importance as well as counseling and practical advice. Psychopharmacological treatment has to be modified and monitored carefully, if a mother wants to breast-feed. Studies have in the meantime also shown positive effects of oestrogen substitution. Non-pharmacological treatments such as baby massage or bright light therapy are new promising approaches. A specific manualized form of psychotherapy for women with postpartum depression has also been shown to be effective.

S09.02

Estrogen-treatment in postpartum depression

A. Ahokas*. *Mehilainen Clinic and University of Helsinki, Finland*

While the postpartum period has typically been described as a time of unqualified happiness, the period can be a biologically vulnerable time for severe postpartum depression in women. No other life event brings about changes that rival the neuroendocrine and psychosocial changes associated with pregnancy and childbirth. Gonadal steroid hormones are neuroactive steroids and exert extensive neuromodulatory effects that may increase the risk of depression in women. A growing body of evidence suggests that subsets of women are susceptible to depression caused by sharply declining levels of estrogen after parturition. Postpartum depression has special features, may create clinical problem and can be resistant to conventional psychiatric treatment interventions. Correcting the hormonal balance by physiologic estradiol may result to clinical recovery of depression. The presentation will review clinical effects of estrogen on postpartum depression. Therapeutic options, issues regarding measurement of estrogen concentrations, and dosing strategies of physiologic 17- β estradiol will be discussed.

Reference

Ahokas A, Kaukoranta J, Wahlbeck K, Aito M. Estrogen deficiency in severe postpartum depression: successful treatment with physiologic 17- β estradiol: a preliminary study. *J Clin Psychiatry* 2001;62: 332–66.

S09.03

New antipsychotics and antidepressants in the treatment of postpartum disorders

A.R. Rohde*. *Psychosomatics in Gynecology, Womens' University Hospital, Bonn, Germany*

Because of the severity of illness most postpartum psychotic patients have to be treated as in-patients and a psychotropic medication is necessary. The variation in depression occurring post partum is much wider, as well regarding severity of illness as also duration. Although treatment alternatives should always be considered, i.e. psychotherapy, light therapy and so on, in severe cases and depression with a duration more than a couple of weeks psychopharmacological treatment has to be considered. In most cases of postpartum depression which fulfil the criteria of depressive episode according to ICD-10 or DSM-IV (app. 6-8% of the deliveries) the use of antidepressants is necessary to avoid a chronic course and long-lasting disturbances of the mother-child-bonding and even more severe complications like suicide or extended suicide. Breastfeeding and the wish of the mother to continue to breastfeed have always to be discussed very carefully because the necessity to stop nursing the child can cause additional feelings of guilt and insufficiency for the mother. Therefore, the fact that most psychotropic agents attain measurable levels in breast milk is important for the selection of the medication. In the light of less and less severe side effects the newer drugs are more preferable, but because our knowledge regarding psychotropic agents and lactation comes mainly from case reports it is very limited. So the choice of the drug has been made very carefully, in any single case considering benefits versus risks. The actual knowledge on atypical antipsychotics and new antidepressants will be presented.

S09.04

Depression in mothers of infants: Group therapy versus individual therapy

M. Hofecker-Fallahpour*, U. Frisch, P. Ley, C. Neuhofer-Katz, R.-D. Stieglitz, A. Riecher-Rössler. *University Psychiatric Outpatient Department, Basel, Switzerland*

Objectives: Depression during pregnancy and in the early years of motherhood is a common complication of this lifespan with possibly long-lasting consequences for the whole family. In Basel a group therapy specifically adjusted to the needs of depressed mothers was developed and compared to individual therapy-as-usual. A manual was written to facilitate general application.

Methods: The manualized group program which consisted of 12 group and 1 couple session was administered in 5 consecutive groups to 31 participants. The main therapeutic method used was cognitive behavioral therapy (CBT). Antidepressants were prescribed if necessary. Subsequently a control group of 21 participants receiving individual therapy-as-usual was evaluated and compared to the specific treatment group in a pre-post-design using BDI, SCL-90-R and other scales. Symptom reduction and other outcome variables were determined.

Results: Both, treatment group and control group showed significant improvement of depression. However differences were seen in acceptance, satisfaction with treatment and couple relationship as well as in terms of treatment costs.

Conclusions: This newly conceptualized group therapy proved to be efficacious and effective. The performance of the treatment program is facilitated by the manual.

S09.05

Baby massage and postpartum depression

V. Glover*, K. Onazawa, M. O'Higgins. *Institute of Reproductive and Developmental Biology, Imperial College, London, UK*

Complementary and alternative medicine is the first choice for many people suffering from anxiety and depression. These are the only medical conditions for which the majority seek complementary or alternative treatments, rather than orthodox. It is probable that these percentages are even higher in the perinatal period when women are likely to be even more reluctant to take medication. However there is a lack of good quality research in the area of complementary therapies. Maternal postnatal depression carries risk for behavioural and emotional problems in the child. This may be, in part, because the mothers cannot give their infants necessary stimulation and affection. We have carried out a project to study the effects of attending massage classes on depressed new mothers. Such mothers were identified using the Edinburgh Postnatal Depression Scale. Half attended five weekly sessions of the massage class; the other half acted as controls. All attended a directed support group. Twelve in the massage group and 13 in the control group completed the study. The primary outcome was comparison of video tape of 'before and after' face to face interactions between mother and baby. Initial interactions were impaired in all mothers. The scores for the mothers in the control group stayed the same for the period of the trial. With the mothers who attended the massage classes the interaction scores improved into the normal range. We are currently aiming to confirm and extend these finding with a larger prospective trial.

S18. Symposium: Determinants of Compliance with Treatment of Patients with Psychosis

Chairpersons: Michaela Amering (Vienna, Austria), Thomas Bock (Hamburg, Germany)
14:15 – 15:45, Hall D

S18.01

Compliance to antipsychotic medication

A. Rossi^{1*}, L. Arduini¹, P. Stratta², O. Rinaldi¹, A. Di Genova¹.
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²Department of Mental Health, L'Aquila, Italy

Subjective Responses (SR) to antipsychotics is one of the factors influencing compliance: a negative SR seems to be related to non-compliance. Furthermore, recent studies indicate differences on SR between conventional antipsychotics and atypical antipsychotics. The Drug Attitude Inventory is the most effective subjective measure for obtaining specific attitudes about antipsychotic effects and is the only available subjective-self report measure. Aim of the study was to investigate the psychometric properties of the Italian version of the DAI by exploring its construct validity. Furthermore, differences between treatment with conventional antipsychotics and atypicals in terms of SR to medication were evaluated. Design: 90 voluntary admitted patients with DSM-III-R Schizophrenic patients, age range between 18 and 50 years, treated with typical antipsychotics able to participate in the study, were selected for the validation study. 41 voluntary admitted patients with DSM-III-R Schizophrenic disorder were selected for determine SR to antipsychotics. Explorative factor analyses with Varimax Rotation were used to analyse DAI scores. Differences on SR to antipsychotics

between groups were tested by means of independent t-tests (two-tailed). Results: Extraction methods found 7 factors, which explained 62.5% of the total variance. The first 2 factors could be labelled as - subjective response to treatment - construct and factors 3 to 7 as - attitude to medication - construct. The results on independent t-tests suggest that atypical antipsychotics may have SR advantages over conventional antipsychotics.

S18.02

'Pharmacophilia' and 'pharmacophobia' - Patients' attitudes towards antipsychotic medication and its determinants

I. Sibitz^{1,a}, H. Katschnig^{1,2}, R. Goessler², A. Unger¹, M. Amering¹.
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Objective: To identify factors influencing attitudes towards psychopharmacological treatment in patients suffering from schizophrenia and schizoaffective psychoses.

Method: 92 clinically stable participants in an outpatient psychoeducational program have been defined with the use of the Drug Attitude Inventory scale as 'pharmacophobic' and 'pharmacophilic' and have been compared with regard to sociodemographic variables, clinical characteristics, subjective deficit syndrome, illness concepts, knowledge, locus of control and quality of life.

Results: The 59 'pharmacophilic' and the 33 'pharmacophobic' patients did not differ significantly with regard to most sociodemographic variables, symptoms, classic personality traits such as locus of control and self-concept and quality of life. The only differences concerned real life experiences like number of admissions and actual experience with desired and undesired effects of medication.

Conclusions: Pointers to drug attitudes may be derived from patients' previous actual experience with drug treatments. The impact of subjective experiences on attitudes towards medication and compliance need to be a main focus of interventions targeting attitudes towards pharmacological treatments.

S18.03

Non-compliance as a resource: Learning from uncooperative and untreated patients

T. Bock*. Department of Psychiatry, University of Hamburg, Germany

Despite the availability of various different and improved drugs, up to 50% of patients do not take their medication as prescribed or do not take it at all. Important factors relating to compliance or non-compliance concern the chemistry of the therapeutic relationship - rather than the chemistry of the drug. Do reductionist illness concepts and hierarchical therapeutic offers turn patients off? Is a narrow biological approach to psychiatry turning into a problem for its own expectations? Non-compliance is not only a symptom of severe illness and a predictor of poor outcome. It is the expression of a failed co-operation, for which both partners carry responsibility. Are we, as professionals sufficiently co-operative/compliant? Are we interested in subjective models of explanation, in individual and inter-familial coping strategies? Are we to considering medication as one part in a comprehensive offer? Instead of demanding insight from patients, we ourselves must first consider the biographic and functional meaning of symptoms and coping. Only then can non-compliance be understood as a sometimes necessary form of self-assertion and contour - vital issues for persons with the experience

of psychosis. The ongoing struggle for co-operation can become an essential therapeutic challenge that can be creative and fruitful. Experiences with a specialized service for opinionated patients ('Eigensinn'), reports of unusual patterns of co-operation, and results of a study of 'natural histories of schizophrenia' shed light on the limits of general guidelines and on the importance of the recognition of the uniqueness of each individual story of compliance and non-compliance.

S18.04

Psychiatric advance directives: A qualitative study of informed consumers deliberating

M. Amering^{1,*}, P. Stastny², K. Hopper³. ¹*Department of Psychiatry, University of Vienna, Austria.* ²*Bronx Psychiatric Center, Bronx, NY.* ³*Center for the Study of Issues in Public Mental Health, Nathan S. Kline Institute for Psychiatric Research, Orangeburg, NY, USA*

The established legal mandate and high expectations for Psychiatric Advance Directives (PADs) stand in contrast to the dearth to empirical evidence pertaining to the benefits, adverse effects and actual implementation of the procedure. This study was designed to explore the interests, concerns and planning activities of informed consumers contemplating PADs. Standard qualitative research techniques were used to investigate consumer deliberations following a brief peer-conducted training session. Field observations were followed by face-to-face interviews and focus groups. 33 persons with extensive experience with psychiatric crises and hospitalization participated. Transcripts were coded using QSR-N6, analyzed for thematic content and provisional results were member-checked. PADs were readily understood and held great appeal. Brief training sessions set in motion a labor-intensive process of deliberation. Executing a PAD proved a complex project that involved conceptualizing how the process would work in one's own life, mobilizing resources, reviewing past experiences and thinking through risks and benefits. Such work held great meaning, especially the prospect of being respected as an active agent in relations with the mental health system. Obstacles were encountered that delayed or derailed this process. PADs are best thought of as complex tools in planning for future crisis management, rather than ready-made, focal interventions to enhance compliance and treatment outcomes. They hold great potential to engage consumers in a serious and balanced collaborative process, but further developmental work is needed to clarify the rules of engagement and institutional resources to support this new dialogue between consumers and service providers.

S26. Symposium: Future Perspectives of Pharmacotherapy in Alzheimer's Disease

Chairpersons: Harald Hampel (Munich, Germany),
Uwe Meya (Basel, Switzerland)
14:15 – 15:45, Hall E

S26.01

Perspectives for Alzheimer therapy with neuroimaging and biomarkers: From early diagnosis to tracking progression and therapy

H. Hampel*. *Department of Psychiatry and Psychotherapy, Ludwig-Maximilian University, Munich, Germany*

With the evolving pharmacological era for the treatment of Alzheimer's disease (AD), there is a growing urgency to develop biochemical markers, as well as biomarkers based on imaging techniques to aid early accurate diagnosis, characterize patient populations and quantify the extent to which new drugs reach intended targets, alter proposed pathophysiological mechanisms and achieve clinical outcomes. Biomarkers support stratification of patient populations or quantification of drug benefit in primary prevention or disease-modification studies. Enrichment of trials with patients with similar prognosis according to a particular biomarker or combination of biomarkers could speed up proof-of-concept and dose-ranging studies. A wide range of imaging-based biomarkers are presently being studied for AD. These include volumetric MRI of whole brain or brain regions, as well as functional MRI. Multiple biochemical analytes have been proposed, the most obvious of which are CSF β -amyloid and tau proteins, as they seem intimately involved in the pathology of AD. However, there are many different therapeutic approaches predicated on different pathophysiological hypotheses that might require different mechanistic markers. It is therefore likely that a multi-modal biomarker approach stratified for ease of use, sensitivity and specificity will be needed in AD. In summary, clinically useful biochemical and imaging derived markers are clearly required in AD to inform regulatory and therapeutic decision making regarding candidate drugs and their indications in order to help bring new medicines to the right patients faster than they are today.

Reference

Blennow, K and Hampel, H. *Lancet Neurology* 2 (2003) p. 605-613.

S26.02

Lipid lowering strategies in dementia

B. Winblad*, M. Kivipelto. *Karolinska Institutet Alzheimer Disease Research Center, Neurotec, Huddinge University Hospital, B84, Stockholm, Sweden*

Hypercholesterolemia in midlife is associated with an increased risk of Alzheimer's disease (AD) in epidemiological studies. High dietary intake of saturated fat and cholesterol has been related with the risk of dementia. Animals fed with cholesterol rapidly accumulate brain β -amyloid. Experimental research has revealed that high cholesterol levels may directly induce AD neuropathology by modulating APP metabolism and depletion of intraneuronal cholesterol by statins inhibits β -amyloid production. It has been observed that inhibition of APP β -secretase occurs in parallel to cholesterol reduction, but in contrast, the activity of the α -secretase is increased upon cholesterol reduction. Thus, low cholesterol stimulates the non-amyloidogenic pathway. Besides lowering cholesterol, statins have many pleiotrophic effects, which may be beneficial for CNS and associated with a reduced risk of AD, including endothelial protection via actions on the nitric oxide synthase system, antioxidant, anti-inflammatory, anti-platelet and immunomodulatory effects. Three clinical studies have reported significantly reduced rates (to 70%) of dementia and AD in subjects who had used statins as cholesterol reducing drugs. However, two recent randomised studies (HPS and PROSPER) found no significant effect of statin treatment on cognitive functions. Both these studies had relatively short follow-up times (3-5 years) regarding the development of

dementia. Besides in the prevention, statins may have a role also in the treatment of AD. A pilot study reported that simvastatin decreased b-amyloid levels in the CSF and slowed the progression of AD. These observations may have valuable implications for future strategies of prevention and treatment of AD.

S26.03

Amyloid-beta protein related treatment strategies in Alzheimer's disease

R. Dodel*. *Department of Neurology, Friedrich-Wilhelm-University, Bonn, Germany*

In Alzheimer's disease (AD) brain, region-specific amyloid-deposition is a key neuropathological feature. These pathological alterations are thought to be linked to the cognitive decline and dementia. Accordingly, treatment strategies target inhibition of Abeta-metabolism, Abeta-deposition and the generation of plaques. Recently, several small molecule inhibitors of the beta- and gamma-secretases, the proteases that generate Abeta from its precursor by cleaving amyloid-precursor-protein, have shown in vivo efficacy in mouse models. gamma-secretase inhibitors can lower Abeta and decrease the formation of potentially synaptotoxic oligomers. Concerns, however, about inhibiting the cleavage of Notch and other substrates limit the potential utility of current gamma-secretase inhibitors. Another approach targets stimulating alpha-secretase cleavage of APP to lower Abeta, e.g. by neurotransmitter-mediated enhancement of alpha-secretase activity. Recently, immunization of APPV717F transgenic mouse with pre-aggregated Abeta1-42 was reported to attenuate amyloid-plaque formation as well as improvement of behavioral deficits. Similar findings have been reported in mice when antibodies against Abeta were administered. A clinical trial to prove efficacy of this approach using AN1742 (Abeta1-42+QS-21) was discontinued shortly after due to severe adverse events. A subgroup analysis of AD patients enrolled in this study, however, demonstrated a significant improvement in MMSE-scores in patients who developed auto-antibodies compared to non-immunized patients or patients who did not develop these antibodies. Although, the adverse events of this trial set a breakpoint to active immunization for AD, it is not the 'end of the beginning' and several new approaches are currently investigated. The presentation will highlight these newer approaches.

S26.04

May the future of pharmacotherapy for Alzheimer's disease be found in the past? MAO-B inhibition revisited

U. Meya*, E. Borroni. *Global Development, F. Hoffmann-La Roche AG, Basel, Switzerland*

Monoamine oxidase B (MAO-B) is over-expressed more than 3-fold in reactive astrocytes associated with senile plaques in the brain of patients with Alzheimer's disease in comparison to surrounding tissue or age-matched control brains. The enzymatic activity of MAO-B is coupled to the formation of hydrogen peroxide and indirectly to the production of oxygen radicals. The over-expression of MAO-B is thought to contribute to the pathogenesis of Alzheimer's disease by chronically exposing the brain to an increased damaging oxidative stress. Inhibition of MAO-B activity reduces formation of toxic reactive oxygen species and it is therefore expected to delay the progression of the disease.

The published literature will be reviewed with respect to the clinical utility of this approach. The implications for future drug development in this field will be discussed.

S80. Symposium: Disclosure of the Diagnosis of Dementia to the Patient: 'To Tell or Not To tell'

Supported by an unrestricted educational grant from Janssen-Cilag

Chairperson: Norman Sartorius (Geneva, Switzerland)
14:15 – 15:45, Hall F

S80.01

Alzheimer family Associations' stand on the process of diagnosis disclosure: Results of an European survey (23 countries)

J. Selmes Van Den Bril*. *Fundacion Alzheimer España (FAE), Madrid, Spain*

Since a diagnosis of Alzheimer's disease or dementia is disclosed as a norm to the family of the person diagnosed, this survey was aimed at collecting the opinions of national Alzheimer family associations, members of Alzheimer Europe, on whether such a diagnosis should be disclosed to the person him/herself. Results are presented and discussed. Through this survey, Alzheimer Europe hopes to ensure that, in future, the opinions of family associations are adequately reflected in discussion on this important topic. While this issue is widely (and often controversially) discussed by health professionals, the opinions of family association have been largely absent from this discussion.

S80.02

Doctors' attitudes and EDCON consensus statements

G. Stoppe*. *Psychiatric University Clinic, Basel, Switzerland*

Despite advances in treatment and management of dementia, the issue of whether people with dementia should be told their diagnosis remains a controversial area. Merits and demerits of telling the diagnosis of dementia to the patient are well described in the medical literature but there is not a clear answer to the question whether the opportunities from knowing the diagnosis outweighed the limitations. Clinicians are generally uncomfortable when speaking to the patient and precise criteria to define the recommended 'individual approach' to the problem are lacking. The few existing guidelines do not adequately address the clinical and psychological complexities of patient disclosure of dementia and there is no clear consensus expressed by multidisciplinary experts nor published. There is a wide variation in the medical practice whatsoever the concerned speciality and clearly marked cultural differences between countries. The European Dementia Consensus Network (EDCON) selected this controversial issue as a first exercise to reach consensus. Conclusions and recommendations will be discussed.

S80.03

Topic to be advised

P. Ashley*. *UK*

S80.04

Legal aspects of the disclosure of diagnosis to the demented patient in Europe

H. Lecca-Marcati. *Greek Association of Alzheimer's Disease, Athens, Greece*

The disclosure of a diagnosis of dementia obviously plays an important role, as without prior knowledge of their health situation, people with dementia cannot be expected to make valid and informed choices about their own lives. It of the utmost interest to carry out an inventory of those legal dispositions, which pertain to the relationship between medical staff and their patients in order to see how the question of disclosure of diagnosis and access to information about a person's state of health are treated from a strictly legal point of view. While medical ethics codes regulate the duties of the medical profession and thus give guidelines on how doctors should act under different circumstances, legislation on patients' rights emphasizes the fact that patients have rights which they can enforce under certain circumstances.

Free Communications: Child Psychiatry II

14:15 – 15:45, Hall G

Temporal perception in velo-cardio-facial syndrome

M. Debbané^{1,*}, B. Glaser¹, V. Braissand¹, M. Gex-Fabry², S. Eliez¹. ¹*Division of Child and Adolescent Psychiatry, Geneva University School of Medicine.* ²*Clinical Research Unit, Department of Psychiatry, Geneva University Hospitals, Geneva, Switzerland*

As children with velo-cardio-facial syndrome (VCFS) develop, they are at increased risk for psychopathology. Previous studies suggest that approximately one third of affected individuals eventually develop psychosis. Given that VCFS and the concomitant symptomatology result from a known genetic origin, the biological and behavioral characteristics linked to the syndrome provide an optimal framework for conceptualizing the associations among genes, brain development, and behavior. Evidence from numerous studies indicate that the cerebellum plays a critical role in time perception. Furthermore, cerebellar dysfunction has been linked to temporal perception deficits in subjects with schizophrenia. The purpose of the current study was to investigate the relationship between time perception skills and cerebellar vulnerability in the VCFS population. In this study, thirty children and adolescents with VCFS were matched for sex and age with typically developing control subjects. All subjects were administered auditory (beep stimuli) and visual (image stimuli) temporal perception tasks. In both tasks, participants were asked to identify the longest of the two presented stimuli. Performance was subsequently analyzed in order to yield a perceptual threshold measure. Our investigation illustrates the differences in time perception ability between individuals with VCFS and typically developing controls. Additionally, correlations between perceptual threshold and cerebellar gray matter density are presented. Finally, this research effort contributes in defining the cognitive phenotype associated with VCFS, and delineating cognitive factors involved in the development of psychosis.

Information processing impairment in Asperger Syndrome: A pilot study

R. Yoran-Hegesh^{1,2,*}, S. Kerzman^{3,4}, Z. Ben-Nahum⁴, M. Kotler^{1,2}. ¹*The Child and Adolescent Outpatient Clinic, Ness-Ziona Mental Health Center, Ness Ziona.* ²*Psychiatry Department, Sackler Faculty of Medicine, Tel Aviv University, Ramat Aviv.* ³*Research Department, Beer Yaakov Mental Health Center, Beer Yaakov.* ⁴*Anima Scan Ltd., Ashdod, Israel*

Background: Asperger syndrome (AS) is a pervasive developmental disorder (PDD) characterized by deficits in social interaction in the presence of normal intelligence.

Objective: To assess information processing (IP) among children with (AS) in order to elucidate the cognitive base to their handicap. Hypothesis was that IP in AS patients would be impaired comparing to healthy children. Method: Subjects were 25 AS patients (23 boys and 2 girls) and 47 healthy children (43 boys and 4 girl). Age: 14.8±6.1 years versus 15.1±1.3 years (p=.81). Tools were computerized neuro-cognitive battery 'CogScan', which included 15 subtests: Finger Tapping test, Inspection time, Motion Perception test, Simple Reaction Time, Choice Reaction Time, Time-Accuracy Tradeoff test, Immediate and Delayed Memory for Pictures, Words and Faces, Stroop test, Digit Symbol Substitution test, and Continuous Performance test. Statistical analysis was performed using Student's t-test.

Results: Significant differences between AS and control groups were found in inspection time (p=.041), motion perception (p=.000), finger tapping test (p=.006), simple reaction time (p=.000), time-accuracy tradeoff (p=.03); selective attention (Stroop: neutral, congruent and non-congruent reaction time: p=.000 and accuracy p=.000) and sustained attention (reaction time: p=.008), and Digit Symbol Substitution test (p=.000).

Conclusions: Children with AS were significantly impaired in input, processing and output stages of IP. AS were significantly impaired in selective and sustained attention, as well as, working memory compared to healthy children. Immediate and delayed memory for pictures, words and faces were preserved among AS children. Further research is suggested.

Keywords: Asperger syndrome, Information Processing, Attention, Memory

Electrophysiological dysfunction in the anterior cingulate cortex as an endophenotype for attention deficit hyperactivity disorder (ADHD)

A.J. Fallgatter*, A.-C. Ehlis, M.J. Herrmann. *Department for Psychiatry and Psychotherapy, University of Würzburg, Germany*

Deficits in allocation of attention as well as in response inhibition belong to the clinical core deficits in ADHD. These symptoms may in part be explained by a dysfunction of the anterior cingulate cortex (ACC), which is considered as an important interface between prefrontal cortex and limbic system. By means of a simple method (Continuous Performance Test with simultaneous 21 channel-EEG), it seems feasible to measure an electrophysiological correlate of the ACC-function termed NoGo-Anteriorisation, NGA. This ERP-measure is characterized by a high interindividual stability, a high short- and long-term test-retest reliability and is independent from age- and gender. The NGA was diminished in 24 adult patients with personality disorders and additional hints for an ADHD during childhood as compared to age- and gender matched healthy

controls. By means of a three-dimensional source location analysis with LORETA an electrical dysfunction of the ACC in this patient group was shown. Moreover, a corresponding dysfunction of the ACC was also found in children with ADHD in comparison to healthy control children. In future studies the questions will be addressed whether this electrophysiological endophenotype may contribute to the diagnosis of subgroups of ADHD and to the measurement of treatment effects on ACC-function.

Developmental milestones at age of 1 year and volume of gray matter, white matter and CSF at age of 33 year? A prospective study of 51 patients with schizophrenia, 20 subjects with other psychotic disorder and 94 control subjects

J.M. Veijola^{1,*}, P. Tanskanen², J. Miettunen¹, E.T. Bullmore³, P.B. Jones³, G. Murray³, M.K. Isohanni¹. ¹*Department of Psychiatry, University of Oulu, Finland.* ²*Department of Radiology, University of Oulu, Finland.* ³*Department of Psychiatry, University of Cambridge, UK*

Background: Schizophrenia has been regarded as a neurodevelopmental disorder. We collected information on infant developmental milestones and adult brain structure in individuals with psychosis and members of the general population.

Methods: The ages at which individuals of the Northern Finland 1966 Birth Cohort members learned to stand, speak, and became potty-trained, were recorded at a 1-year examination. All Cohort members been admitted in hospital due to psychosis in adolescence or adulthood were invited for a field survey in 1999-2001 including structural MRI scan of the brain. Control subjects (N=94) with no history of psychosis were randomly selected from the same birth cohort. Volumes of CSF and gray and white matter were measured in 51 schizophrenia patients and in 20 subjects with other psychotic disorders.

Results: The volume of CSF in male control subjects was associated statistically highly significantly with age of learning to stand without support. Male control subjects who had learned to stand without support earlier had smaller volumes of CSF than those who had learned the skill later, but in schizophrenia, no relation between development and adult brain CSF was seen.

Conclusions: We found that there was a positive association between age of learning to stand and volume of cerebrospinal fluid in control subjects. In subjects with schizophrenia no such association was found. To our knowledge, this is the first study to provide direct evidence that the links between infant development and adult brain structure are different in schizophrenia and the general population.

Parental separation at birth and mental health disorders in adulthood

P.H. Mäki^{1,*}, J.M. Veijola¹, M. Joukamaa², H. Hakko¹, M.K. Isohanni¹. ¹*Department of Psychiatry, University of Oulu.* ²*Department of Social Psychiatry, Tampere University, Finland*

Objective: We studied the association between very early separation and later development of schizophrenia, depression and alcohol dependence.

Method: The index cohort consisted of 3020 subjects born in 1945-1965 in Finland who were temporarily isolated from their family immediately after birth to nursing homes due to tuberculosis in the family. The average separation time was seven months. For every index subject, two reference subjects were matched for sex, year and place of birth. The data on schizophrenia, depression and alcohol dependence were obtained from the Finnish Hospital Discharge Register by December 31, 1998.

Results: The 28-year cumulative incidence of schizophrenia was 1.6% both in the index cohort and in the reference cohort (RR 1.0; 95%CI 0.8-1.4). 4.0% of the index subjects and 3.1% of the reference subjects had been treated in hospital due to a depression (1.3; 1.1-1.7). The cumulative incidence of alcohol dependence was 3.5% in the index cohort and 2.8% in the reference cohort (RR 1.3; 1.0-1.6).

Conclusion: Separation at birth was not found to be associated with schizophrenia. Temporary placement to adequate nursing homes in the first year of life is unlikely to increase the risk for schizophrenia. The index subjects had a somewhat elevated risk for hospital treated depression and alcohol dependence. One explanation may be that the separation from the mother at birth may have unfavourable effects on psychological development. On the other hand, separation from the parents at birth was not found to be strongly associated with severe adulthood depression and alcohol dependence.

Validation of the Parenting Stress Index (PSI) among German speaking parents in Basel, Switzerland

T. Nathell Benkert*, M. Hofecker-Fallahpour, R.-D. Stieglitz, A. Riecher-Rössler. *University Psychiatric Outpatient Department, Basel, Switzerland*

Objectives: Parenting stress is concerned with stress in the parent-child system as perceived by the parent. It also refers to the stress that is experienced within the role as a parent. The Parenting Stress Index (PSI) is a reliable and valid self report measurement in English assessing parenting stress. In Basel a validation of the PSI in German has been applied to a sample of 372 German speaking parents with children from the age of 1 month to 12 years.

Methods: The PSI was translated into German with a re-translation into English. The questionnaire was thereafter sent to different institutions like schools, kindergartens and day care centers where they were handed out to the parents. The parents received a package of PSI and one complementary questionnaire by using BDI, SCL 90-R, Dyadic Adjustment Scale (DAS), and other scales. The sample consists of 322 mothers and 50 fathers.

Results: Reliability coefficients of the PSI in this study revealed a pattern similar to findings based on samples of the original version. The correlation between the PSI and the other scales resulted as predicted.

Conclusions: This study indicates that the items of the PSI are very well fitted to be summarized into a questionnaire assessing parenting stress. The factor structure of the PSI samples of the original version was replicated. Accordingly, an instrument assessing parenting stress does now exist in German.

S22. Symposium: Is the Risk of Criminality and Violence on the Rise among the Mentally Ill?

Chairpersons: Sheilagh Hodgins (London, UK), Rüdiger Müller-Isberner (Haina, Germany)
14:15 – 15:45, Hall H

S22.01

Preventing crimes by persons with schizophrenia

S. Hodgins*. *Department of Forensic Mental Health Science, Institute of Psychiatry, King's College, University of London, UK*

Recent evidence indicates that persons who develop schizophrenia are at increased risk for criminal offending, particularly violent offending. These consistent findings compel us to implement treatments and services to prevent such offending. To do this, it is essential to understand the temporal relationship between offending and contact with psychiatric services and the correlates of offending. The sample studied included 232 men with schizophrenia or schizoaffective disorder at discharge from forensic and general psychiatric hospitals in four sites, in Canada, Finland, Germany, and Sweden. In the weeks preceding discharge, the participants underwent intensive investigations and provided access to medical, social and criminal records. Of the forensic patients, 77.8% had at least one previous admission to general psychiatric services. Of the general psychiatric patients, 24.3% had a record of criminal offending. 39.8% of the forensic and 10.8% of the general psychiatric patients had committed offences before their first admission to general psychiatry. After admission, the 59 patients with offences before first admission, committed 195 non-violent and 59 violent offences, and subsequently 49 of them committed one or more serious violent offences that led to admission to a forensic hospital. The offenders were distinguished by a pervasive and stable pattern of antisocial behaviour, including substance abuse, that had been evident from at least mid-adolescence. These results, plus those from other investigations, suggest that general psychiatric services require resources in order to assess and provide adequate treatments and services to a sub-group of patients with schizophrenia in order to prevent criminal offending.

S22.02

The effects of psychiatry reform on criminality and violence of the mentally ill

H. Schanda^{1,2,*}, D. Schreiner^{1,2}, Th. Stompe^{1,2}, G. Ortwein-Swoboda¹, G. Knecht⁴, Th. Waldhoer³. ¹JA Göllersdorf. ²Psychiatric University Clinic. ³Department of Epidemiology, Institute of Cancer Research, University of Vienna, Austria. ⁴Department of Forensic Psychiatry of the Clinicum Nord, Hamburg, Germany

It is an ongoing discussion, whether or not psychiatry reforms are associated with an increase of illegal behaviour of subjects with major mental disorders. Because of the methodological problems only a few studies on this issue exist - and they yield contradictory results with respect to criminality and violence in general as well as to homicide. Epidemiologic data from Austria show that the changes in general mental health care were associated with a significant increase of criminality since 1990 (see: 'Psychiatry reform, coercive treatment and violence: Developments in Austrian mental health care', Symposium S72). But a study on homicide including all convictions/criminal commitments (NGRI) between 1975 and 1999 shows no statistically significant changes over longer periods of time of the contribution of subjects with MMDs (exclusively patients with schizophrenia) to homicidal violence. Their risk was increased even before the introduction of the reforms. These results support the hypothesis that the risk of homicide in patients with MMDs is due to relatively stable (primarily illness-related) factors, while the risk of criminality in general is much more depending on lack of social support, poverty and substance abuse; in the latter case the contribution of illness can be interpreted rather as a secondary

effect, mediated through insufficient treatment. However, recent data lead one to assume that the negative side-effects of deinstitutionalization (neglect of the special needs of a subgroup of severely ill subjects) may have an effect also on the incidence of homicidal violence.

S22.03

Comprehensive services for offenders with major mental disorders

R. Müller-Isberner*. *Klinik für Forensische Psychiatrie, Haina, Germany*

Offenders with major mental disorders present multiple problems, that usually include a long history of antisocial behaviours, attitudes, and ways of thinking, substance abuse, and a lack of pro-social skills. Most of them are noncompliant with interventions, particularly medication, have a lifestyle conducive to deviant behavior, and are at high risk for recidivism. In general, they are difficult to manage, and their problems are long-standing. Comprehensive services providing evidence based treatment in both hospital and community settings have been shown to be effective in reducing the risk of violence and crime in this offender population. Critical to success is an assertive, comprehensive, intensive and highly structured multi-modal behavioural approach that is provided over a long period of time. A forensic psychiatry service that implemented such a model of service 15 years ago will be described. The hospital serves a catchment area that includes approximately 6 million inhabitants. Data will be presented covering the period from 1984 to 2002. During this period, the proportion of new patients who were admitted following a serious violent offence increased by 53%, and the percentages returning to the hospital dropped from 24% to 14%. The mean length of inpatient stay (49 months) and the percentage of patients allowed out of the hospital without accompanying staff (45%) remained stable. The number of escapes decreased from 35.5% to 1.4%. The number of serious incidents within the hospital decreased from 10 in the period 1991 to 1994 to zero in the period 1999 to 2002.

S22.04

Topic to be advised

T. Fahy*. *Department of Psychiatry, Regional Hospital, Galway, Ireland*

S22.05

Implications of preventing crimes by persons with schizophrenia for stigma and rejection of the mentally ill

G. Thornicroft*, V. Pinfold. *Health Services Research Department, Institute of Psychiatry, Kings College London, UK*

Misconceptions about schizophrenia are known to be common. During the late 1990s a series of studies were carried out around Europe, Australia and Canada, to document baseline public attitudes towards schizophrenia before developing intervention programmes to tackle the problem of public stigma. Recently increasing fears and 'social distance' towards people with schizophrenia have been documented. The view that people with schizophrenia are dangerous, difficult to talk to, and unpredictable are enduring constructs, constantly reinforced by popular culture, and largely resistant to 'corrective' public education campaigns. Globally, there is very little evidence of effective interventions which reduce this

discrimination against people with schizophrenia. Particularly: (i) in cross-cultural settings, (ii) for target groups identified as most adversely discriminatory, and (iii) in the evaluation of long-term cost-effectiveness. The World Psychiatric Association Global Program Against Stigma Because of Schizophrenia, has created a groundbreaking international network of centres active world-wide. Recently structured interventions have shown significant improvements in knowledge and attitudes of the public towards schizophrenia. This paper will discuss the implications of measures designed to prevent crimes by persons with schizophrenia in relation to reducing stigma. Key

References

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W03. Workshop: The Accreditation Process in European Psychiatry

Chairpersons: Göran Sedvall (Stockholm, Sweden),
Henning Sass (Aachen, Germany)
14:15 – 15:45, Hall I

W03

The Accreditation Process in European Psychiatry

H. Sass², G. Sedvall¹. ¹*Karolinska Institute and Hospital, Stockholm, Sweden.* ²*University Hospital Aachen, Germany*

Continuous Medical Education (CME) and Continuous Professional Development (CPD) are highly debated issues in a wealth of countries in Europe and world-wide. These concepts incorporate the idea of life-long learning in the medical profession. Quality assurance of CME is the responsibility of the National Authorities. The Workshop will give the opportunity to discuss how quality and effectiveness of the accreditation process and of the awarding of international CME credits can be managed at the European level. To stimulate and harmonize psychiatric educational activities in Europe, the AEP developed a series of CME courses starting at the 11th AEP Congress in Stockholm May 2002. The accreditation process of the CME course programme as well as the on-site evaluation including feedback by participants and teachers will be presented. Based on these experiences and in order to develop European standards for CME programmes, a Task Force on Education and Accreditation has been developed by the AEP, together with the European Union of Medical Specialists (UEMS), the World Psychiatric Association (WPA) and the WHO. The current activities of the Task Force regarding the promotion of a system of mutual recognition of CME events among the European countries or the establishment of a committee providing accreditation on international events until this system is implemented will be presented. Furthermore, the role of UEMS and the contribution of WPA in accreditation in Europe shall be discussed in more detail in order to gain an insight into the different partners within the Task Force.

S35. Symposium: Cognitive and Behavioural Deficits in Dementia: From Brain to Mind

Chairpersons: Nicole Von Steinbüchel (Geneva, Switzerland), Constantin Bouras (Geneva, Switzerland)
16:15 – 17:45, Hall A

S35.01

Assessment of health-related Quality of Life in Swiss-French populations with and without dementia

N. Von Steinbüchel^{1,2,*}, M. Bellion², K. Weber¹, C. Beni², Ch. Delaloye¹. ¹*Center of Neurogerontopsychology, Geriatric Psychiatry.* ²*Department of Psychology, University of Geneva, Switzerland*

Until date, little is known about the elderly's (with and without dementia) self-rated subjective health-related quality of life (HrQOL), which serves as an important outcome measure for treatments and psychotherapeutical interventions. Valid, reliable and sensitive generic and disease-specific measures are still lacking. A few studies have shown that persons with dementia can inform about their HrQOL, yet no specific HrQOL instrument for these persons is available in French. Also validation data for generic HrQOL measures in elderly French populations still has not reached consensus. Swiss-French validation results of three generic (SF-36, Ware et al. 1992; Munich Live Dimension List, MLDL, v. Steinbüchel et al. 1999; WHOQOL-OLD, WHOQOL-OLD Group, in prep.) in over 150 healthy elderly and 40 people with dementia will be reported. Validity of two disease-specific instruments (Quality of Life - Alzheimer's Disease, QOL-AD, Logsdon et al. 1999; Dementia Quality of Life, DQOL, Brod et al. 1999) in 15-40 persons with dementia will be discussed. Additional measures such as the Mini Mental State Examination (MMSE, Folstein et al. 1975), the Hospital Anxiety and Depression Scale (HAD, Zigmond et al. 1983), a socio-demographic and co-morbidity questionnaire were used. Preliminary results show good psychometric characteristics for the SF-36, MLDL, WHOQOL-OLD, and the QOL-AD in elderly with and without dementia. Psychometric characteristics of the DQOL however are less convincing. Concluding, self-rating of generic and disease-specific HrQOL in elderly with and without dementia is feasible (per interview), providing promising variables for future outcome research.

S35.02

Neurobehavioural symptoms in dementia

F. Assal*. *Department of Neurology, University Hospital, Geneva, Switzerland*

Neurobehavioural symptoms (NPS) such as anxiety, agitation, or hallucinations often accompany cognitive symptoms in dementia and contribute to its differential diagnosis. In Alzheimer Disease, NPS are not part of the diagnostic criteria but evolve over time in a specific pattern. Neurocognitive and neuroimaging data help us to tackle the brain regions that elicit some of them, i.e. apathy and the medial frontal region. Neuropathological data support progression of the pathology to defined cortical regions. Some neurobehavioural

genetics data show correlations between serotonin receptor genes polymorphisms and NPS such as agitation and delusions. In Dementia with Lewy Bodies (DLB) visual hallucinations are part of the diagnostic criteria and delusions frequent. DLB, Parkinson's disease, Parkinson's Disease with dementia all present with these NPS and share a common pathological hallmark, i.e. Lewy bodies (LB), explaining why the boundaries between these diseases appear less distinct than anticipated. Accumulation of LB in visual associative and limbic areas may be associated to visual hallucinations as well as part of cognitive deficits. To conclude, NPS are linked to specific neuronal networks in the brain and involvement of the pathology in specific brain regions. They respond to treatment such as acetylcholinesterase inhibitors, antidepressants or atypical antipsychotics. Genetic polymorphism may not only predispose individuals to express specific NPS but may explain heterogeneous responses to pharmacological treatments. More correlations of NPS with neuropathological markers in vivo using neuroimaging and biomarkers will allow better understanding of the biological basis of NPS and enhance quality of care in patients with dementia.

S35.03

Atypical Alzheimer's disease (AD) exemplifies links between clinical features and brain anatomy

A. Von Gunten*. *Service Universitaire de Psychiatrie de L'Age Avancé, Département de Psychiatrie-CHUV, Prilly-Lausanne, Switzerland*

Diagnosis of AD in clinical settings is mainly based on the early memory impairment and the progressive development of AD neuropathological changes within the mesial temporal lobe. However, numerous cases of dementia do not meet the accepted clinical and neuropathologic criteria for the definition of AD, yet they show the same histopathologic features. These atypical AD cases present with prominent and early deficits in either language, musical skills and prosody, motor abilities, executive capacities, visuospatial skills or behavioural and psychiatric features. As the sequence of cognitive deterioration in typical AD is thought to reflect the stepwise invasion of the cerebral cortex by two major pathological hallmarks of AD, neurofibrillary tangles [NFT] and senile plaques [SP], atypical clinical features suggest the presence of an unusual NFT or SP invasion of the cerebral cortex. In particular, clinicopathological studies have described strong relationships between the focal formation of AD lesions and neuropsychological impairment and showed that select neuronal types and degeneration of specific corticocortical projections occur in atypical AD cases. The different types of atypical AD and their cognitive and behavioural features are briefly reviewed in this presentation with particular reference to the hypothesis of corticocortical disconnection in AD.

S35.04

Alzheimer's disease as a disconnection syndrome? Neuropsychological evidence

M. Van der Linden*, X. Delbeuck. *Cognitive Psychopathology Unit, University of Geneva, Switzerland*

Numerous neuropathological, neurophysiological, and neuroimaging data are consistent with the existence of a disconnection disorder in Alzheimer's disease (AD). Moreover, a few recent neuropsychological studies have also provided direct evidence of a disruption of interhemispheric connections in AD. We will briefly

review these neuropsychological data but also, we will present the potential consequences that inter- and intrahemispheric disconnection problems would have on AD patients' cognitive performance. More specifically, we will show how a disconnection interpretation might explain at least some of the episodic memory deficits and executive dysfunctions observed in AD. Finally, the consequences of a disconnection problem on the behavioral problems observed and the difficulties encountered in the daily life of the AD patients will be discussed.

S65. Symposium: Acute and Transient Psychotic Disorders

Chairpersons: Andreas Marneros (Halle, Germany), Charles Pull (Luxembourg)
16:15 – 17:45, Hall B

S65.01

Brief polymorphic psychoses and the psychotic continuum

A. Marneros*, F. Pillmann. *Department of Psychiatry and Psychotherapy, Martin-Luther University Halle-Wittenberg, Halle, Germany*

The group of 'Acute and Transient Psychotic Disorders' of ICD-10 and in some extent also the group of 'Brief Psychoses' of DSM-IV are an inhomogeneous group of psychotic disorders. But the subgroup of ICD-10 'Acute Polymorphic Psychotic Disorders' is obviously more homogeneous having strong similarities to the cycloid psychoses of the German psychiatry and to bouffée délirante of the French psychiatry. Some authors assumed that this group is an independent group having no nosological relations to schizophrenia or other psychotic disorders. We investigated the question of the nosological independence of Acute Polymorphic Psychotic Disorders within the frame of the Halle Study on Acute and Brief Psychoses (HASBAP). Several relevant findings do not support the assumption of the nosological independence. The most important finding against the independence theory is the longitudinal instability of Acute Polymorphic Disorders. Patients having once an Acute Polymorphic Psychotic Disorder can develop longitudinally other syndromes like schizoaffective, affective and schizophrenic episodes. The most frequent 'syndrome shift' is a change from Acute Polymorphic Psychotic Disorder into an affective or schizoaffective episode. Although the nosological independence of Acute Polymorphic Psychotic Disorder is not supported by these findings there is also no evidence supporting doubtless the affiliation of these disorders to the group of schizophrenia or affective disorders. It seems that Acute and Polymorphic Disorders are building a continuum between relatively stable entities like schizophrenia and affective disorders. Apart from the theoretical relevance of such an assumption there are also therapeutical, prognostical and other implications.

S65.02

Long-term results from the Halle Study on brief and acute psychoses

F. Pillmann*, A. Marneros. *Department of Psychiatry and Psychotherapy, Martin-Luther University Halle-Wittenberg, Halle, Germany*

The Halle study of Brief and Acute Psychoses is a combined cross-sectional and long-term follow-up study of a sample of 42 patients with Acute and Transient Psychotic Disorders. The index group is

compared to clinical control subjects with Positive Schizophrenia and Bipolar Schizoaffective Disorder (BSAD) and with healthy controls. We now have completed the third wave of follow-up conducted 7 years after the index admission or 12 years after the onset of the disorder. More than 90% of the living subjects could be interviewed. Group comparisons continue to show a better outcome of ATPD compared to Positive Schizophrenia and, in some aspects, a better outcome than Bipolar Schizoaffective Disorders. Relapse rates, however, are substantial in ATPD and match those in schizophrenia. The social consequences of ATPD are generally less severe than those of schizophrenia, although the rate of invalidity pensions was rather high in the present sample. Less than half of the ATPD patients display a monomorphous course (only other ATPD episodes during long-term course), affective and schizoaffective episodes occur in many patients. Only a minority of patients fulfils the criteria of a schizophrenic disorder in the long run. The impact of predictive factors will be discussed as well as therapeutic implications.

S65.03

The validity of ICD-10 acute and transient psychotic disorders

A. Bertelsen*. *Institute for Basic Psychiatric Research, Aarhus University Hospital, Aarhus, Denmark*

The ICD-10 Acute and Transient Psychotic Disorders are defined as non-organic, non-affective psychotic disorders with acute onset within two weeks and with limited duration, less than one month for Acute Schizophrenia-like Psychotic Disorder and Acute Polymorphic Psychotic Disorder with Schizophrenic Symptoms to delineate them from Schizophrenia, and less than three months for Acute Polymorphic Psychotic Disorder without Schizophrenic Symptoms, and Other Acute Predominantly Delusional Psychotic Disorders to delineate them from Persistent Delusional Disorder. The diagnosis therefore only can be provisional until proved by full remission within the allowed time for duration. Otherwise, the diagnosis has to be changed to Schizophrenia, Delusional Disorder or other psychotic disorders. The polymorphic disorders are supposed to correspond to the Bouffées Délirantes Polymorphes des Dégénérés of the French traditional classification and to Kleist and Leonhard's Cycloid Psychosis. The acute psychotic disorders may also correspond to atypical psychosis and to some types of reactive psychosis when associated with acute stress. The DSM-IV Brief Psychotic Disorder may correspond to any of the acute psychotic disorders if the duration is less than one month. The diagnostic stability of the ICD-10 Acute and Transient Psychotic Disorders is quite low with a change to Affective Disorder or Schizophrenia in about half of the cases in a Danish follow-up study. Epidemiologic and prognostic validity has been examined in a number of US studies with suggestions for modification of the diagnostic criteria with extension of the duration.

S65.04

Refining the definition of ATPD

R. Mojtabai*. *Department of Psychiatry, University of Columbia, New York State Psychiatric Institute, New York, NY, USA*

Introduction of the acute and transient psychotic disorders (ATPD) in the tenth edition of the International Classification of Diseases (ICD-10) was a major step towards formalizing a uniform definition for these rare but important psychotic disorders. Introduction of explicit criteria for ATPD has also enabled researchers to examine the validity

of individual criteria and propose revisions that would further improve the use, reliability and validity of the ATPD diagnoses. This report presents empirical work conducted by our group for validating two fundamental criteria of ATPD: the acute mode of onset and the 1-3 months duration of psychosis. Our research supports the validity of the acute mode of onset as a criterion that distinguishes non-affective remitting psychoses with a benign course and outcome and fewer negative symptoms at baseline from remitting psychoses with non-acute onset which typically have a poorer prognosis and more negative symptoms. The duration criteria of ATPD, however, appear to be too restrictive. Many cases of remitting psychosis with acute onset last longer than 1-3 months and up to 6 months. Furthermore, there is little evidence for the utility of subclassification of ATPD into distinct disorders and some evidence indicates that eliminating cases with affective features may reduce the heterogeneity of these psychoses. These findings may be used for refining the ATPD criteria in future editions of the ICD. Acute psychoses defined using these empirically-refined criteria tend to be diagnostically stable and to have a consistently benign course over time.

S65.05

Transient psychotic disorders in French speaking countries: Past and present

C. Pull*. *Centre Hospitalier de Luxembourg*

Acute and transient psychotic disorders represent a heterogeneous and poorly understood group of disorders. The nomenclature of these disorders is as uncertain as their nosological status. Little empirical evidence is available up to now, and the limited data and clinical tradition that are used instead to define these disorders have generated concepts that remain controversial. A considerable number of labels have been proposed to designate transient as well as persistent delusional disorders. Prominent concepts among transient delusional disorders are the bouffées délirantes of the French, the 'reactive' or 'psychogenic' psychoses and the 'schizophreniform' psychoses of the Scandinavian and the 'cycloid psychoses' of the German tradition, as well as a number of so-called culture-bound psychoses. The present report will focus on the concept of bouffées délirantes. This concept represents an important aspect in traditional French nosology. In recent years, use of the concepts has, however, progressively declined, especially among the new generation of psychiatrists. The author will describe the concept, its history, and its relation to other psychotic disorders, in particular to schizophrenia. He will also discuss the current position on transient psychotic disorders in French speaking countries. Finally, the traditional concept of bouffée délirante will be compared with current constructs as proposed in the 10th Revision of the International Classification of Diseases or ICD-10 and the IVth Edition of the Diagnostic and Statistical Manual of Mental Disorders or DSM-IV (and its recent Text Revision or DSM-IV-TR).

S50. Symposium: Internet and Information Technology in Psychiatry

Chairpersons: Nils Lindefors (Stockholm, Sweden), Martin Elphick (Oxford, UK)

16:15 – 17:45, Hall C

S50.01

National electronic care Records for the UK - Will IT work for mental health services?

M. Elphick*. *Littlemore Hospital, Oxford, UK*

A major programme is in progress to provide an integrated electronic care records service for the whole National Health Service in the UK. Once it is in place, it should be possible for healthcare workers to see summarized records of their own patient's past and current care in all primary and secondary health settings. In the first phase (2004) the available information will consist mainly of records of referrals, admission and discharge, diagnosis, medication and procedures. For mental health services the national record will also contain a risk summary and details of the community care co-ordinator. The same systems will provide access to a knowledge base for clinicians, service users, carers and managers - the National electronic Library for Health, treatment guidelines, etc. In two subsequent phases over the next decade the available information will be increased in detail. This talk will briefly describe progress so far; the service design (in a non-technical way); the expected benefits of the service to mental health service users and clinicians; and the safeguards which are necessary to ensure confidentiality and protect against misuse.

S50.02

Treatment of social phobia via the internet. Results from a RCT and some clinical observations

G. Andersson^{1,*}, A. Holmström², L. Sparthar², T. Furmark², P. Carlbring². ¹*Department of Behavioural Sciences, Linköping.* ²*Department of Psychology, Uppsala, Sweden*

The aim of this study was to investigate the effects of an Internet-administered self-help program for social phobia. Included were 64 subjects with diagnosed social phobia (SCID-interview), who were randomized to treatment (n=32) or a waiting list condition (n=32). Treatment lasted for 9 weeks and consisted of a self-help material including psychoeducation, Clark and Wells cognitive model, cognitive restructuring, exposure instructions, social skills and relapse prevention. Also included were 2 in-vivo group exposure sessions. Results based on intention-to-treat analyses showed significant improvements in the treatment group for social phobia specific measures like Liebowitz Social Anxiety Scale (LSAS-SR), Social Phobia Scale (SPS), but also on measures like the Beck Anxiety Inventory (BAI) and the Quality of Life Inventory (QOLI). The mean between-group effect size across measures was Cohen's $d=0.74$. Results indicate that Internet-administered self-help is a promising treatment complement for social phobia.

S50.03

Internet-based treatment for panic disorder: Research-status and implementation in a psychiatric setting

J. Bergström^{1,*}, A. Karlsson¹, S. Andreewitch¹, C. Rück¹, M. Bragesjö¹, G. Andersson², P. Carlbring³, N. Lindefors¹. ¹*Karolinska Institute and Hospital, Psychiatry Center Karolinska, Stockholm.* ²*Department of Behavioural Sciences, Linköping University.* ³*Department of Psychology, Uppsala University, Sweden*

Cognitive behavior therapy (CBT) is a well-established evidence-based treatment for anxiety disorders. However, a major challenge is to increase the accessibility and affordability of CBT. One way of achieving this is to use self-help based treatments and to minimize the amount of therapist time spent on each patient. A medium particularly suitable for this is the Internet. Clinical trials have

shown the efficacy of computer- and Internet-based treatments for various psychiatric disorders. These self-help based treatments are markedly more time- and cost-effective than traditional CBT. The limited evidence available shows that Internet-based self-help with minimal therapist contact via e-mail is an effective intervention for panic disorder. Recent studies demonstrate clinically significant change as well as improved psychological well being and functioning. Some evidence even suggests that it could be as effective as traditional CBT. However, attempts to evaluate the effectiveness of such treatments for panic disorder in a regular psychiatric setting has to date been scarce. At the Psychiatry Center Karolinska, a pilot study of Internet-based treatment for patients referred for panic disorder is now underway. The presentation will include preliminary results from the study as well as clinical impressions and a demonstration of the treatment program.

S50.04

Interapy, protocolled treatment of posttraumatic stress and work related stress (burnout) through the internet

A. Lange*. *Department of Clinical Psychology, University of Amsterdam, The Netherlands*

The paper starts with the general structure and elements of the Interapy treatment site and provides a brief overview of the Interapy research on internet driven structured treatment of posttraumatic stress. Subsequently, the most recent Interapy treatment, on work related stress is discussed in more detail. The paper deals with the elements of treatment; the design of a randomized controlled study comparing active protocolled treatment (n=96) versus psychoeducation only (n=44). The results of this study show effect sizes for the different outcome measures between $d = .60$ and $d = 1.22$, and positive subjective evaluations by the participants. Finally, the implications of the study for future research are discussed.

S50.05

Internet as information source and platform for decision making and treatment in psychiatry

N. Lindefors*, J. Nilsson. *Department of Clinical Neuroscience, Psychiatry Section, Karolinska Institutet, Stockholm, Sweden*

Internet provides a diversified and complex avenue through the World Wide Web to acquire information on various aspects of psychiatry. Internet in association with online access to data bases with diagnostic manuals and treatment programs available on the desk top computer may facilitate the development of safer medical treatments and administrative support for psychiatric care and rehabilitation. Complementary to computerised patient records data bases with up-dated information on drugs provides safer prescriptions. Useful information domains may be patient drug history, scientific drug information, guidelines and current patient specific data. In addition, the professional user will probably request access to links to relevant databases, directories, organisations, and professional information. Together with a system for drug prescription online all patient specific information may be integrated on a common Web portal. Accessibility, speed, user friendliness and quality of content will be requisitions for future systems. The cost to develop safe systems will be significant considering (1) legislative demands from national boards of health and welfare, (2) professional demands for medical safety (3) information integrity and (4) system reliability. Finally, an example of a novel treatment program

will be discussed. A pilot study is under way to administer a computer-based training program to out-patients with early stage schizophrenia. A computer-based training program is administered to out-patients with early stage schizophrenia. The training is focused on working memory training and can be utilized in the patient home milieu and is supported by regular interaction with a trained psychologist through Internet.

S05. Symposium: Mothers with Schizophrenia and their Unmet Needs

(Organised by the AEP Section on Women's Health)

Chairpersons: Dora Kohen (Leigh, Lancashire, UK),
Christiane Hornstein (Wiesloch, Germany)
16:15 – 17:45, Hall D

S05.01

Mothers with schizophrenia and their unmet needs: A UK perspective

D. Kohen*. *Lancashire Postgraduate School of Medicine, Leigh Infirmary, Leigh, Lancashire, UK*

A Prospective database of pregnant women with schizophrenia has been established in 1996 to assess the needs of women through pregnancy and early years of motherhood. 197 women have been included in this database and their demographic variables, lifestyle problems psychiatric needs, antidepressant and psychotropic medication usage during pregnancy, needs for hospital admissions, outcome of pregnancy and their first year of motherhood has been noted. Accumulated data shows that there is an increased risk of prenatal and perinatal depression, clearly under recognized by mental health professionals. Antidepressant treatment makes a difference in the mothering abilities of women with schizophrenia. It is important to note that gradual decrease to lower doses of medication is well tolerated in pregnancy and does not lead to further breakdown. However psycho-social problems, unsupportive relationship, domestic violence all independently increase the risks of breakdown and hospital readmissions. Psychotropic medication did not lead to morphological or behavioural teratology but alcohol and drug abuse and domestic violence was associated with abnormalities in the fetus. Substance abuse was closely linked with limited mothering abilities and removal of the infant from the mother.

S05.02

Sexuality, pregnancy and childrearing among women with schizophrenia

L.J. Miller*. *Women's Mental Health Program, University of Illinois, Chicago, IL, USA*

Over the past few decades, deinstitutionalization, decreased stigma for out-of-wedlock births, and new antipsychotic medications have increased sexuality and childbearing for women with schizophrenia. This has presented both opportunities and problems for those women. Research has shown that, compared to women without mental illness, women with schizophrenia have more lifetime sexual partners, less likelihood of a stable current partner, greater likelihood of sexual assault, more sex exchange behavior, and less

sexual satisfaction. Knowledge of family planning methods is lower in women with schizophrenia, and rates of unplanned and unwanted pregnancies are higher. The majority of women with schizophrenia report worsening mental health during pregnancy. As compared to women without mental illness, women with schizophrenia have delayed recognition of pregnancy and receive less prenatal care. Rates of obstetric complications are higher in women with schizophrenia. The postpartum period is a high risk time for exacerbation of schizophrenia. The symptoms of schizophrenia, when untreated, can impair parenting capability directly and indirectly. Insight into illness is a key factor in influencing parenting capability. Women with schizophrenia experience high rates of custody loss. Their offspring are at high risk for developing mental illness. Interventions to assist parenting can begin during pregnancy. Comprehensive assessment of parenting capabilities includes psychiatric evaluation, record review, interviews of collateral historians, direct observations of parenting, evaluation of the home environment and the social support network, and specific parenting questionnaires. This assessment can guide parenting rehabilitation efforts. Parenting coaching can improve a parent's ability to read and respond to a child's cues. Helpful support services include housing, respite care, in-home services, transportation, and outreach.

S05.03

Psychosis and early parenting

C. Hornstein*, S. Poppe, E. Rave, S. Wortmann, S. Schenk, M. Schwarz. *Psychiatrisches Zentrum Nordbaden, Allgemeinpsychiatrie U. Psychiatrie I, Wiesloch, Germany*

Although there is a growing number of studies showing a significant proportion of women with schizophrenia being mothers, little is known of early mother-baby interaction and parenting skills. Some studies showed interactional difficulties between psychotic mothers and their babies from the first day on. For these groups of severely ill mothers, admitted to the mother-baby-unit, we developed a treatment program, consisting of a cognitive-behavioural group therapy for mothers, an individual video-micro-analytic psychotherapy, a daily support program and a psycho-educational group for fathers. The aim of this program is to improve mothering skills and mother-baby-interaction and to reduce parenting stress as well as difficulties in role transition. Treatment outcome measured by several global ratings will be discussed and extensive evaluation of mother-baby-interaction based on video interaction-analysis (Dinter-Jörg, 1997) will be demonstrated.

S05.04

Gender specific antipsychotic therapy

M. Hummer*. *Department of Biological Psychiatry, Innsbruck University Clinics, Austria*

Different rates of gastrointestinal drug absorption, different extents of sequestration into adipose tissue, different rates of distribution in the body, different enzymatic activity and liver clearance makes different ways in which male and female bodies respond to medication plausible. A major difference in the kinetics of drug metabolism is due to the greater adipose content of female bodies resulting in a longer duration of drug action. On one hand this might result in less rebound and withdrawal symptoms after drug discontinuation but on the other hand longer wash out periods are required. Furthermore, different hormone levels, dependent from the menstrual cy-

clus, might affect the interaction of psychotropic drugs of receptor at receptor cites. In addition particular needs of woman include paying attention to pregnancy status, parenteral status, menstrual status, concurrent use of oral contraceptions or replacement hormones and thyroid status. All of these issues have to be considered in the prescription of psychotropic medication to enable a successful and save treatment.

W10. Workshop: Psychotropic Drugs in Pregnancy and Lactation

Chairpersons: Cyril Höschl (Prague, Czech Republic), Dagmar Seifertová (Prague, Czech Republic)
16:15 – 17:45, Hall E

W10

Psychotropic drugs in pregnancy and lactation

E. Herman², C. Höschl¹, P. Mohr¹, D. Seifertová¹. ¹*Psychiatric Center Prague, 3rd Medical Faculty.* ²*1st Medical Faculty, Charles University, Prague, Czech Republic*

Treatment of mental illness during pregnancy and lactation poses a difficult dilemma: whether and how to prescribe medication for women who want to become or already are pregnant, or who are breastfeeding. Psychiatrists have to weigh the risks and benefits for a baby and a mother, including risks of untreated mental illness (risks of relapse, unfavorable outcome, insufficient childcare, etc.). Our current knowledge on the effects of psychotropic drugs on fetuses, newborns and infants is largely based on the animal studies, case reports, retrospective studies, chart reviews, or drug registers. Women of fertile age are almost completely excluded from the early phases of drug trials, the criteria of their participation in the Phase II & III trials requires a reliable contraception. Alternative approaches in treatment of mental illness during pregnancy include psychotherapy or ECT. However, in many cases, drug administration is necessary. The potentially most serious adverse effects on fetus and newborn are teratogenicity, intoxication, neonatal and withdrawal symptoms, and long-term neurobehavioral impacts. The workshop covers both theoretical and practical issues of administration of psychotropic drugs (antipsychotics, antidepressants, mood stabilizers, anxiolytics, and hypnotics) and ECT during pregnancy and lactation. In the introductory part of each of the sessions, a brief summary of drug effects, contemporary treatment state-of-art and practical guidelines will be reviewed. Case reports will be presented and the participants will be encouraged work in the groups.

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W16. Workshop: The Impact of Classification Systems on Psychiatric Training: Images and Stories

Chairpersons: Allan Tasman (Louisville, KY, USA), Levent Küey (Istanbul, Turkey)
16:15 – 17:45, Hall F

W16

The impact of classification systems on psychiatric training: Images and stories

A. Tasman¹, L. Küey². ¹*Department of Psychiatry and Behavioral Sciences, University of Louisville School of Medicine, Louisville, KY, USA.* ²*WPA Zonal Representative for Southern Europe, Istanbul, Turkey*

The advances in diagnostic classification in the DSM and ICD series over the last several decades have led to the present ability to make reliable diagnosis of psychiatric illness. This has had a very positive effect on the ability to carry out clinical and basic science research, leading to tremendous advances in the field. The classifications, however, remain atheoretical, and are based on a symptom cluster approach to diagnosis. We are still a long way from an etiologically based system. The present nosological approach has not only effected research, but psychiatric training as well. The impact on training has been of mixed benefit, the subject of this session. The authors will review the various training effects of our present approaches to diagnosis, including the use of clinical and educational vignettes from their own experience. In addition, the contrast between the US and European training systems in this area will be discussed. Suggestions for addressing concerns will also be discussed. Opportunity for interaction with the participants will be an important part of this session.

Free Communications: Suicide

16:15 – 17:45, Hall G

Bullying, depression, suicidal ideation and deliberate self-harm in Spanish adolescent

M. Ruiz-Veguilla^{1,*}, F. Diaz², M. Prados³. ¹*Department of Psychiatry, San Cecilio University Hospital.* ²*Child and Adolescent Psychiatry Unit, Virgen de la Nieves University Hospital.* ³*Chana School, Psychology Unit, Granada, Spain*

Objective: To assess the relation between being bullied or being a bully at school, depression, suicidal ideation and deliberate self-harm (DSH).

Design: Three questionnaires (about bullying, child depression questionnaire (CDQ), suicidal ideation and DSH) were completed by 410 pupils aged 12-17 in four different schools.

Results: Depression, severe suicidal ideation and DSH were more common among girls (11,55 vs. 9,28; $p < 0,05$. 2,47 vs. 1,42; $p < 0,05$. 7,6% vs. 2,8%; $p < 0,05$). DSH was more common among bullying victims (21%). The prevalence of being bullied sometimes or more often was 3, 4%. After adjusting for aged and sex, significant variable ($p < 0,05$) for being bullied were CDQ score (OR=1,16; IC 95%= 1,04-1,3), suicidal ideation score (OR=0,57; IC 95%= 0,38-0,85). The prevalence of being bullies sometimes or more often was 4,2%. After adjusting for aged and sex, significant variable ($p < 0,05$) for being bullies were CDQ score (OR= 1,14; IC 95%= 1,02-1,28), sex (OR=0,21; IC 95%= 0,04-0,9).

Conclusion: Adolescents who are being bullied and those are bullies are increase risk of depression. Given the concurrent behavioural and emotional problems associated with bullying, the issue of bullying merits serious attention, both future research and preventive intervention.

The winter low in seasonality of suicide and implications for suicide prevention

V. Ajdacic-Gross^{1,2,*}, D. Eich-Höchli¹, M. Bopp², F. Gutzwiller², W. Rössler¹. ¹Psychiatric Epidemiology Research Group, Zurich University Psychiatric Hospital. ²Institute of Social and Preventive Medicine, University of Zurich, Switzerland

Background: Recent works have shown that heterogeneous processes, for example, determine seasonality of suicide associated with suicide methods. Research in seasonality of suicide has mainly focused the peak in late spring / early summer months. The authors present results that are specific for the low in seasonality of suicide and discuss the implications for suicide prevention.

Data and methods: Suicide seasonalities were calculated using tables of the Swiss Federal Office of Statistics (since 1876) and individual records (since 1969). Univariate analyses of aggregated data relied on the Edwards' test. In bivariate analyses cross-correlations were calculated after pre-whitening (filtering) the time series with ARIMA.

Results: First, aggregated daily data of suicide frequencies show a steady decline in November and December. This process abruptly ends after New Year and the frequencies switch to the initial level. Second, cross-correlations indicate that the positive association between suicide frequencies and climatic variables like temperature is exclusively due to variation in the cold season.

Conclusions: Two seasonal dynamics are described that contribute to the variation of suicide frequencies in autumn / winter months. Both are presumably related to the functioning of social networks in the cold season in so far as tight social networks with relatives and friends lead to higher social integration and in some sense also to higher social control. Systematic involvement of social networks - for example, in tertiary prevention - should attract more attention.

Suicides within 12 months of contact with mental health services in different diagnostic groups

I.M. Hunt, N. Swinson*, J. Robinson, H. Bickley, S. Flynn, R. Parsons, J. Burns, J. Shaw, N. Kapur, L. Appleby. *Centre for Suicide Prevention, Manchester University, UK*

Background: Comparisons of the clinical care preceding suicide in different diagnostic groups are scarce.

Objectives: To describe the clinical characteristics of suicides within different diagnostic groups in England and Wales.

Methods: A national clinical survey based on a 4-year sample of suicides. Data were collected on those in contact with mental health services in the year before death.

Results: 5,099 (24%) suicides notified to the Inquiry had had contact with mental health services in the year before death. Data were obtained on 4,859 (95% response rate). Of these, 4696 (98%) had a diagnosable psychiatric disorder, most often affective disorder (42%), schizophrenia (20%) alcohol and drug dependence (14%) and personality disorder (11%). Those with schizophrenia were more likely to die by violent means, had higher rates of drug misuse and previous violence. They had the highest proportion of ethnic minority suicides and high rates of non-compliance with medication. A third of suicides with affective disorder died within a year of illness onset, often within 3 months of discharge. Those with substance dependence had high rates of co-morbidity and loss of contact with services. The majority of suicides with personality disorder had a history of self-harm and multiple previous admissions. They were more likely to have discharged themselves.

Conclusions: These findings show there are differences in clinical characteristics between different diagnostic groups. Services should develop follow-up policies for those with substance dependence and personality disorder; introduce dual diagnosis services for those with schizophrenia and ensure early follow-up for patients with affective disorder.

Suicides in psychiatric in-patients and those recently discharged

N. Swinson*, I.M. Hunt, J. Meehan, J. Robinson, S. Flynn, H. Bickley, R. Parsons, J. Burns, J. Shaw, N. Kapur, L. Appleby. *Centre for Suicide Prevention, Manchester University, UK*

Background: Previous research has identified a reduction in psychiatric care as a risk factor for suicide.

Objectives: To describe the characteristics of in-patient suicides and those who committed suicide within three months of discharge from psychiatric in-patient care (post-discharge suicides). Method: A national clinical survey based on a 4-year (1996-2000) sample of suicides in England and Wales. Data were collected on those in contact with mental health services in the year before death.

Results: 5,099 (24%) notified to the inquiry had had contact with mental health services in the year before death. Data were obtained on 4,859 cases (95% response rate). 16% of the sample (n=754) died during an episode of in-patient care; the majority (80%) had either schizophrenia or a major affective disorder. A third occurred on the ward; the majority by hanging, most commonly from a curtain rail and using a belt as a ligature. Most cases were deemed not to be at immediate risk of suicide. A total of 1100 individuals (23%) died within three months of discharge; 30% occurring in the first two weeks after leaving hospital. Their last admission was typically short (< 7 days) and ended in patient-initiated discharge, and 40% occurred before the first follow-up appointment.

Conclusions: In-patient facilities should remove fixtures that can be used in hanging. Regular risk assessments should take place, particularly on the first week after admission. Prevention of suicide after discharge requires earlier follow up in the community for high-risk patients, including those who initiate their own discharge.

Suicidality runs in families: An epidemiological study of young adults and their mothers

R. Lieb*, T. Bronisch, M. Hoefler, A. Schreier, H.-U. Wittchen. *Clinical Psychology and Epidemiology, Max-Planck-Institute of Psychiatry, Munich, Germany*

Objectives: Family studies of individuals who completed/attempted suicide report a 4-6-fold risk of suicide or suicidal behavior compared with relatives of controls. However less studied and less clear is if there exist a different familial liability for different subtypes, if the transmitted spectrum includes primarily suicidal behavior as well as if the transmitted spectrum includes suicidal behavior and suicide ideas. We studied the familial aggregation of suicidality in a representative population-based sample of young adults and the potential different familial subtypes of suicidality.

Methods: Data were derived from baseline and 4-year follow-up assessments of 933 respondents aged 14-17 at the outset of the Early Developmental Stages of Psychopathology (EDSP) study, a prospective community study of adolescents and young adults. Suicide ideation and attempts in respondents and the adolescents were

assessed using the Munich-Composite-International-Diagnostic-Interview with DSM-IV algorithms. Diagnostic information about maternal suicidality was collected by independent direct diagnostic interviews with the mothers.

Results: The results show a familial association of primarily suicide attempts and less pronounced of suicide ideas between mothers and children. This transmission seems to be independent of sociodemographic characteristics, depression, and comorbidity with anxiety disorders, somatoform and substance use disorders. There is a tendency to an earlier manifestation of suicide attempts of the offspring of mothers with suicide attempts.

Conclusions: The results confirm that suicidality runs in families irrespective of gender, sociodemographic characteristics, and other psychopathology in the family. The question remains open if the familial transmission is caused by genetic loading or model learning.

Association of anger-related traits and TPH gene in suicide attempters

P. Baud*, C. Buresi, A. Malafosse. *Département de Psychiatrie, Hôpitaux Universitaires de Genève (HUG), Clinique de Belle-Idée, Switzerland*

A decrease in serotonin (5-HT) neurotransmission has been repeatedly associated with suicidal behaviour, and also with aggressive-impulsive and anger-related personality traits. A genetic component is postulated to contribute to these associations.

Objectives: The aim of the present study was to investigate whether TPH A218C polymorphism is associated with anger-related personality traits in suicide attempters.

Methods: Suicide attempters (n=168) were compared with control subjects (n=123) for TPH polymorphism and anger-related traits. All subjects were evaluated with the State-Trait Anger Expression Inventory (STAXI), an instrument assessing actual anger and anger disposition.

Results: There was a statistically significant difference between healthy controls and suicide attempters for each of the five dimensions of STAXI. Moreover, State Anger scores were significantly different in suicide attempters according to genotype distribution (AA+AC vs. CC: Mann-Whitney: p=0.001). The genetic and clinical significance of this result will be discussed.

S70. Symposium: Reframing the Concept of Schizophrenia: From Dementia Praecox to Schizotaxia

Chairpersons: Heinz Katschnig (Vienna, Austria), Richard S.E. Keefe (Durham, NC, USA)
16:15 – 17:45, Hall H

S70.01

Kraepelin's dementia praecox: Course and not symptoms

G.E. Berrios*. *Neuropsychiatry Services, University of Cambridge, UK*

Current interpretations of what Emil Kraepelin (EK) meant by dementia praecox (DP) are anachronistic. The 1960s debate on what

EK 'really said' was inconclusive. Submerged in a conceptual space which we can barely understand, EK was not interested in surface differences between diseases. Influenced by the 19th century concept of biological species, he believed that nosological definitions depended upon diseases remaining true to themselves. This view be borrowed from his brother Karl, foremost classifier of molluscs in the second half of the 19th century. - EK's final classification of insanity (8th edition) was tripartite and based on more than one criterion. Under 'endogenous conditions with a tendency to dementia' (Die endogenen Verblödungen) were included Die Dementia praecox and Die paranoiden Verblödungen (Paraphrenien). Then come Das epileptische Irresein and Das manische-depressive Irresein sharing with each other more than Das manische-depressive Irresein seems to share with Dementia praecox. Little research has been done into why did EK include Das epileptische Irresein. This should clarify EK's nosological philosophy and explain why he was prepared to concede that although there were no symptomatic differences between Dementia praecox and Manic-Depressive insanity the two could be distinguished on longitudinal analysis. - What has been said above challenges the view that there is a continuity between Morel, Kahlbaum, Hecker, Kraepelin, Diem, Bleuler, and Schneider and suggests that the history of schizophrenia consists of parallel narratives.

S70.02

Eugen Bleuler's schizophrenia: Cognitive and affective symptoms and not hallucinations and delusions

E. Gabriel*. *Social Medical Centre, Medical Directorate, Vienna, Austria*

The paper deals with Eugen Bleuler's contribution to the then young teaching on dementia praecox (Kraepelin, 1904), published mainly in his book on 'Dementia praecox oder die Gruppe der Schizophrenien', 1911. The difference between Bleuler and Kraepelin can be seen from four main points of view: (1) Bleuler referred to dementia praecox, a singular, but spoke of the group of schizophrenias, thus not referring to an outcome ('dementia') but to an attempt to understand the psychological connections within the disorder's phenomenology. (2) He tried to bring some order in the variety of symptoms described very comprehensively (177 pages) by distinguishing (a) clinically between basic and accessory symptoms and (b) theoretically between primary and secondary symptoms, the ones being directly related to the illness process and the others being understandable reactions to that illness process. (3) He identified as basic symptoms the famous '4 A-s': disturbances of thought (associations), of affect, ambivalence and autism. (4) The course could vary. The influence of the concept was important in terms of its practical use ('Morbus Bleuler'), its use in the field of research (not only psychological) and its prints in later classifications as in the formulation of basic psychological concepts ('affect logics').

S70.03

Kurt Schneider's first rank symptoms reconsidered

H. Katschnig*. *Department of Psychiatry, University of Vienna, Austria*

Today's official diagnostic criteria for schizophrenia are heavily influenced by Kurt Schneider's First Rank Symptoms which are basically hallucinations and delusions. They were first published in 1939 in a brochure for general practitioners and not for psychiatrists. At the

end of this brochure Kurt Schneider wrote: 'I attempt to establish a rank order of psychopathological symptoms, which might also be of interest to psychiatrists'. In fact, they became extremely important in psychiatry, once Kurt Schneider's book 'Clinical Psychopathology' was translated into English in 1959. From the 1970ies onwards these symptoms became nearly synonymous with the definition of schizophrenia in operational psychiatric diagnostic schemes, such as the PSE/CATEGO system, the RDC, the DSM and the ICD, while thought disorders were downgraded. It is not clear why the first rank symptoms became so dominant, but their high reliability and their presentation as a list might have impressed the authors of these systems. Also, it is noteworthy that these definitions, based on 'positive' symptoms, fitted the efficacy spectrum of the then available neuroleptic drugs. The validity of the first rank symptoms, however, remains obscure until today and it is suggested to have a fresh look at the definition of schizophrenia. It is increasingly becoming apparent that cognitive symptoms might be more relevant than the first rank symptoms, for the failure of adjustment of patients in the community, for assessing treatment outcomes with the second generation antipsychotics, and for conducting etiological research focussing on genetic and organic factors.

S70.04

Cognition and the concept of schizotaxia

R.S.E. Keefe*. *Duke University Medical Center, Durham, NC, USA*

Patients with schizophrenia are cognitively impaired. The average patient with schizophrenia performs similarly to the lowest 5-15% of healthy controls, and about 95% of patients with schizophrenia have poorer cognitive performance than predicted by their parents' level of education. These deficits are present in a milder form years before the onset of psychosis, often persist despite symptom remission, and are reported in biological relatives of patients with schizophrenia. Thus, cognitive impairment is a primary enduring feature of the illness akin to Meehl's description of schizotaxia. Patients with schizophrenia have more severe cognitive deficits than patients with major depression, bipolar illness, or obsessive-compulsive disorder. Does the severity, specificity and primacy of this impairment suggest that cognitive impairment should be a part of the formal diagnosis of schizophrenia? Consideration of this question will need to address these issues: Does the addition of cognitive impairment to the criteria for schizophrenia help define the 'point of rarity' between schizophrenia and other diagnoses? Does cognition improve the validity and the utility of the diagnosis of schizophrenia? Finally, what is its relevance for the development of new drugs for the treatment of schizophrenia? This presentation will discuss the position of the Food and Drug Administration in the U.S. that the recognition of cognitive impairment in the diagnostic nomenclature would be an important step toward warranting a pharmacologic indication to a drug that improves cognition.

S81. Symposium: Section on Psychotherapy

Chairpersons: Fritz Hohagen (Lübeck, Germany),
Roland Broca (Premontre, France)
16:15 – 17:45, Hall I

S81.01

The re-establishment of the section of psychotherapy - future perspectives

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Psychotherapy is an integral part of psychiatry. In clinical practice, psychiatry treats the whole spectrum of mental disorders, including those for which psychotherapy is the treatment method of first choice, neurotic disorders and such as personality disorders. Consequently, the UEMS recommendations for postgraduate training stipulate training in the relevant psychotherapy methods. Given the rapid developments in evidence-based psychotherapy, a regular update of competence in psychotherapy on the part of psychiatrists warrants continuing education in this field. To this end, the re-established Section of Psychotherapy of the AEP will provide workshops on psychotherapy as part of the AEP training programme. Furthermore, the inclusion of psychotherapy in psychiatry is important from a professional as well as a political perspective, helping to define the profile of psychiatry in contrast to that of other professional groups such as psychology, social work and other mental health care professions. Moreover, psychotherapy research is becoming increasingly important. The development of new research methodologies in neuroendocrinology, neurophysiology and neuroimaging allows investigating neurobiological predictors of psychotherapy and neurobiological changes of the central nervous system under psychotherapy. Thus, new research is bridging the gap between neurobiology and psychotherapy, opening an exciting new field of psychotherapy research in psychiatry. To summarise, the re-established section of psychotherapy aims at contributing an important part of psychiatry in the field of research, postgraduate and continuing medical education and science as well as professional and political aspects to define the profile of the psychiatrist in contrast to other mental health care professional groups.

S81.02

Psychotherapy as part of training for psychotherapy - An European overview

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The role of psychotherapy as part of the identity of the speciality for psychiatry is agreed upon in UEMS Section for psychiatry. However it is a field where an overlap is seen to other professionals as well as the definition of a psychotherapist in terms of qualifications and authorisation is diverse in Europe. To address this issue a report was prepared in 1994 giving an overview of if and how psychotherapy was an integral part of training in psychiatry. Recommendations were given for the charter on training. In 2003 a revised report was prepared. 27 countries - EU, EFTA and associate countries who all form a part of the Section have answered a questionnaire on the position of psychotherapy as a tool for treatment of psychiatric disorders in the public field of psychiatry. Furthermore a status of requirements for training are presented as well as the role of psychotherapy as such as part of recognised health professions are described. This applies to training as well as financial issues. Again a complex picture is seen. There is a need to clarify criteria for authorisation, qualification and visitation for psychotherapy to keep it as an important treatment method for patients with all types of psychiatric disorders. The presentation will focus shortly on the

result from the survey and at greater length discuss the crucial issues concerning a safe use of psychotherapy in the hands of qualified professionals.

S81.03

Medical psychotherapy

P. König*. *Hospital for Nervous Diseases, Rankweil, Austria*

Abstract not received.

S81.04

Promoting psychodynamic thinking in general psychiatry

R. Lucas*. *London, UK*

Abstract not received.

S81.05

Psychotherapy without psychiatrists

F. Caspar*. *Lehrstuhl Klinische Psychologie, Universität Freiburg, Germany*

Abstract not received.

S81.06

The interaction between the psychotherapy process with neurobiology

M. Berger*. *German Society of Psychiatry, Psychotherapy and Neurology, Freiburg, Germany*

Abstract not received.