

Symposia

Friday, April 16, 2004

S03. Symposium: All Psychiatric Disorders are the Result of Gene-Environment Interactions

(Organised by the AEP Section on Epidemiology and Social Psychiatry)

Chairpersons: Jim Van Os (Maastricht, The Netherlands) Robin M. Murray (London, UK)
08:30 – 10:00, Hall A

S03.01

A new paradigm in behaviour genetics: Genotype-Environment interaction in the flow of daily life

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Genotype-Environment interaction refers to the idea that individuals' sensitivity to environmental influences depends on their genetic makeup. This study introduces a new and elegant way to test genotype-environment interaction. 250 female twin pairs (158 MZ and 92 DZ) participated in an Experience Sampling study (ESM). ESM is a structured diary technique used to assess stressors and mood at 10 random times for 5 consecutive days. An increase in self-reported subjective stress was associated with an increase in negative affect and a decrease in positive affect. For each subject, the stress-induced increase in negative affect and decrease in positive affect was calculated. Structural equation modelling was applied to these variables. The best fitting model was chosen, based on fit and parsimony. For the stress-induced decrease in positive affect, the best fitting model was the model with a common environmental factor, explaining 12% of the variance (95%CI 0.01-0.24) and an individual-specific environmental factor, explaining 88% of the variance (95%CI 0.75-0.99). For the stress-induced increase in negative affect, the best fitting model was the model with a dominant genetic factor, explaining 32% of the variance (95%CI 0.13-0.49) and an individual-specific environmental factor explaining 68% of the variance (95%CI 0.51-0.87). This was the first study ever to examine the role of genes and environment in emotional reactivity to daily stressors. The study provided evidence of a gene-environment interaction, in which individuals' sensitivity to small daily life stress is moderated by their genetic makeup.

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S03.02

Do big cities turn on schizophrenia genes? Results from three cohort studies

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Background: There may no other issue in schizophrenia research with more far-reaching public health implications than the finding that young people growing up in an urban environment accumulate an increased risk for schizophrenia. Previous work has suggested that the urban environment impacts on this risk function by facilitating the expression of a pre-existing vulnerability for psychosis, but direct confirmation has been lacking (Van Os et al. 2003a; Van Os et al. 2003b).

Method: A cohort of 1211 adolescents from the EDSP study aged 13-17 years (mean: 15.1 years), growing up in contrasting urban and non-urban environments, completed a self-report measure of psychosis proneness (SCL-90 psychosis scale) at baseline and at the first follow-up around one year post-baseline (T1), and were interviewed by trained psychologists for the presence of psychotic symptoms at the second follow-up around three years post-baseline (T2).

Results: Psychosis proneness at baseline and T1 strongly predicted psychotic symptoms at T2. However, this risk, on the additive scale, was much stronger in adolescents growing up in an urban environment (risk difference: 25%, $P < 0.0001$), than for those dwelling in a non-urban environment (risk difference: 9%, $P = 0.12$). Differences were independent of age, sex, drug use, social class and family history of psychosis, and the SCL-90 psychosis scale at T2.

Conclusion: These findings add credence to the suggestion that a powerful environmental moderator of genetic risk for psychosis is more prevalent in urban environments.

S03.03

Gene-environment interactions in the Edinburgh high risk study

S.M. Lawrie*, P. Miller, H. Whalley, D. Job, D. Owens, E.C. Johnstone. Division of Psychiatry, University of Edinburgh, Scotland, UK

Our ongoing study of initially well young adults with at least two schizophrenic relatives started in 1994. 162 high risk subjects provided some clinical, neuropsychological and/or sMRI data in the first five years. Over 100 high risk subjects and controls have participated in further assessments, including fMRI, in the past five years. Approximately one-half have had isolated psychotic symptoms, some of which have resolved, and 21 have developed schizo-

phrenia to date. The whole high risk group has exhibited declines in mnemonic function and reductions in temporal lobe volumes over time. These deficits are greater in those who have experienced psychotic symptoms, and greater still in those who have developed schizophrenia. Exposure to major life events and regular cannabis use are associated with psychotic symptoms and psychosis itself. Specific interactions between these variables, and measures of genetic liability to schizophrenia, are currently being analysed and these results will be presented.

S03.04

Now that there are susceptibility genes

R.M. Murray*. *Institute of Psychiatry, London, UK*

In the last 2 years a number of genes have been proposed that appear to increase susceptibility for psychosis. The most convincing are neuregulin 1 and dysbindin but others such as COMT and BDNF are also possible candidates. Data will be shown concerning the relationship between such genes and clinical characteristics of schizophrenia, as well as brain structural, neurophysiological and neuropsychological abnormalities associated with schizophrenia. In addition, I will examine possible interactions between such genes and known risk factors for schizophrenia such as psychotomimulant abuse.

S21. Symposium: Can First Episode Psychosis be Predicted and Prevented?

Chairpersons: Joachim Klosterkötter (Cologne, Germany), Wolfgang Maier (Bonn, Germany)
08:30 – 10:00, Hall B

S21.01

Transition to schizophrenia and related disorders: Toward a taxonomy of risk

W. Maier*, S. Theysohn, J. Berning, M. Wagner. *Department of Psychiatry, University of Bonn, Germany*

The early detection and prevention of schizophrenia and other psychotic disorders are receiving rapidly growing attention subsequent to the suggestion that poorer outcome is associated with delayed onset of treatment among patients in their first psychotic episode. Although the first generation of so-called 'prodromal' research programs has produced encouraging preliminary results, more information is necessary on the conversion rates from prodromal states to schizophrenia in specific samples. Early recognition and prevention strategies require a new taxonomy that classifies subjects by their status of risk of imminent onset of psychosis. Without additional knowledge of the mechanisms through which particular constellations of vulnerability factors, precursors, and prodromal symptoms predict the onset of schizophrenia, it is difficult to judge the effects of existing programs. In the contribution three sets of issues will be discussed that need to be resolved before the preventive programs can be implemented into routine care: (1) optimization of predicting the onset of psychotic disorders; (2) development and evaluation of alternative treatment strategies depending on the presenting risk status; and (3) evaluation of costs and benefits of identifying subjects at risk of psychosis/schizophrenia and receiving a specific preventive treatment.

S21.02

Anomalies in self-experience as a core phenotype in the schizophrenia spectrum disorders

J. Parnas*, P. Handest, J. Thalbitzer, A. Vollmer Larsen, L. Jansson. *Department of Psychiatry, University of Copenhagen, Hvidovre Hospital, Copenhagen, Denmark*

In the evolution of the first break schizophrenia, anomalies of subjective experience are the earliest markers of the disease. Our group, mainly inspired by systematic interviews over several years with patients admitted to a mixed diagnostic/first episode unit, was struck by the importance of anomalies of self-awareness. In this presentation, the psychopathological status of these anomalies will be described in several independently studied samples:

1. First admission schizophrenia and schizotypy,
2. Residual schizophrenia and bipolar psychosis,
3. Sz spectrum cases identified in high risk and genetic linkage studies,
4. Longitudinal data on the course of schizotypy.

A new psychometric assessment scheme for anomalies of self-experience will also be presented. The findings will be discussed with a view of early detection.

S21.03

Can first episode psychosis be predicted and prevented?

A. Morrison, P. French, R. Bentall, S.W. Lewis*. *Department of Psychiatry, University of Manchester, UK*

Operational definitions for at risk mental states have been confirmed to predict the onset of psychosis in 15–40% of individuals within one year. Intervention trials to avert or postpone psychosis will be reviewed. The EDIE trial in Manchester UK randomised 60 individuals to cognitive behaviour therapy over 6 months or to a monitoring control and followed cases up at one year. Cognitive behaviour therapy is found to reduce the rates of transition to operationally defined psychosis ($P = 0.02$). Transition rates at one year in the sample as a whole were 18%.

S21.04

Risk factors and prodromal signs in the development of psychosis

K. Maurer*, H. Häfner. *Schizophrenia Research Unit, Central Institute of Mental Health, Mannheim, Germany*

To recognize the schizophrenia risk at an early stage and to identify and diagnose prodromal stages in the early illness course, a two-step procedure called ERIRAOS (Early Recognition Inventory) has been designed and used in the multi-centre German Schizophrenia Network project. In the first step, a screening tool, the 17 item checklist, available as interview and as questionnaire has been prepared for use at slightly elevated risk at the primary care level (GPs, schools etc.). In the second step of risk assessment, a comprehensive 110 items symptom list is completed at the Early Intervention Centres. For each item, a time matrix allows the registration of symptom onset and symptom change (on a 4-point severity scale) over the year prior to the interview in monthly steps. Additional information about psychosis risk results from the evaluation of specific risk factors, indicating a considerable increase of the a priori schizophrenia risk of 1% in the general population. We considered familial load as the most important single risk factor, obstetric and birth

complications, unusual delays and deficits during childhood development, alcohol and drug abuse, delinquent behaviour and a schizotypal personality structure in special ERIRAOS modules. First results of 125 patients included in the German Schizophrenia Network study are presented. We analysed data of the ERIRAOS-checklist, the symptom list and the modules and compared people 'at risk' in the early and the late prodrome of the initial psychotic episode.

S21.05

Can first episode psychosis be prevented?

J. Klosterkötter*. *Department of Psychiatry and Psychotherapy, University of Cologne, Germany*

Early detection and indicated early intervention in the initial prodromal phase should considerably improve the course of schizophrenic psychoses. Yet, the current database is insufficient for a conclusive, evidence-based evaluation of the benefits of such programmes. This paper presents an outline on the actual results of studies on early recognition and prevention. Accordingly, within a year, the rate of transition into first psychotic episodes using the current prodromal criteria amounts to approx. 37%. Apparently, psychological and pharmacological early interventions seem to decrease the rate and to improve prodromal symptoms and global functioning. The presentation of current results will focus on the two multi-centre intervention studies within the German Research Network on Schizophrenia.

S39. Symposium: Genes and Environment in Suicidal Behaviour

Chairpersons: Alain Malafosse (Geneva, Switzerland), Marion Leboyer (Creteil, France)
08:30 – 10:00, Hall C

S39.01

Impaired decision-making in suicide attempters

P. Courtet^{1*}, F. Jollant¹, F. Bellivier², C. Alter², C. Buresi³, D. Castelnaud¹, M. Leboyer², A. Malafosse³. ¹*Department of Psychological Medicine and Psychiatry, Lapeyronie Hospital and INSERM E 0361, Montpellier.* ²*Department of Psychiatry, Albert Chenevier and Henri Mondor Hospitals and INSERM U513, Créteil, France.* ³*Division of Neuropsychiatry Genetics, Department of Psychiatry, Geneva University Hospitals, Switzerland*

Our understanding of suicidal behavior (SB) is incomplete. The 'stress-diathesis' model suggests that a deficit in serotonergic projections to the orbitofrontal cortex (OFC) is involved in susceptibility to SB. The OFC has been implicated in decision-making, a cognitive function dealing with complex choices that may be under serotonergic modulation. In this preliminary study, we assessed decision-making in suicide attempters. We used the Iowa Gambling Task to investigate patients with a history of violent (N=32) or nonviolent (N=37) SB, patients suffering from affective disorders with no history of SB (N=25), and healthy controls (N=82). Patients were assessed when not suffering a current Axis-I disorder. Both groups of suicide attempters scored significantly lower than healthy controls, and violent suicide attempters performed significantly worse than affective controls ($p < 10^{-5}$). No significant differences

were observed between the groups of suicide attempters or between the two control groups. The differences in performances could not be accounted for by age, premorbid level, educational level, number of suicide attempts, age at first suicide attempt, history of Axis-I disorder or medication use. Impaired decision-making, possibly due to emotional dysfunction, may be a neuropsychological risk factor for SB and may increase the homogeneity in future biological and genetic studies of SB. We reported previously that serotonin-related genes were involved in the susceptibility to suicidal behavior. Thus, we investigated in 150 suicide attempters whether the genes coding for the tryptophan hydroxylase (TPH1, TPH2) and the serotonin transporter (5-HTTLPR) may influence the decision-making performances. These data will be presented and discussed.

S39.02

Suicide as interplay of genes and environment through time and place

A. Marusic*. *Institute of Public Health, Ljubljana, Slovenia*

A distinction between proximate and ultimate causation for suicide behaviour can be made. While the proximate causation can only answer how does suicide biopsychosocially happen, the ultimate causation of suicide could also answer the question why does it exist. For example, one type of suicidal behaviour could represent initial accentuation and later dysregulation of aggressive and impulsive behaviour. Male subjects who were more aggressive and brave were better warriors and as such more often rewarded for their actions. Furthermore, the more disinhibited and violent they were the easier it was for them to 'spread' their genes during and after conquering territories. In a more contemporary society, the behavioural manifestations of the same traits have become regarded as pathological. It is particularly likely for these traits to escape from control (potentially with a more acceptable self-aggressive outcome) when under the influence of any disinhibited substance. Some basis for the above generated hypothesis could be found in our recent study. We explained a great part of variation of suicide rates in Europe by regressing the national suicide rate on the capital cities' latitudes and on an interaction term of squared latitude multiplied with longitude. This regression model quantified the so called Finno-Ugrian suicide hypothesis. According to this, the European countries highest in suicide rate constitute a contiguous, J-shaped belt, spanning from Finland to Austria. This area maps onto the second principal component identified for European gene distribution, representing the ancestral adaptation to cold climates and the Uralic language dispersion.

S39.03

Serotonergic and catecholaminergic candidate genes in suicidal behaviour and aggression-related traits

D. Rujescu*, I. Giegling, H.-J. Möller. *Department of Psychiatry, Ludwig-Maximilians-University, Munich, Germany*

We have initiated a case control association study which comprises of 250 suicide attempters and 500 healthy volunteers and investigated serotonergic candidate genes in this behavior. Genetic polymorphisms in the putative tryptophan transporter ABCG1, tryptophan hydroxylase TPH, serotonin 1B receptor 5-HT1B, serotonin 2A receptor 5-HT2A, and serotonin transporter SERT genes were examined. We also investigated the relationship between serotonergic genes and anger, as a subtype of aggression-related behavior.

Our findings do not support the hypothesis that the putative tryptophan transporter ABCG1 is a susceptibility gene for suicidal behavior. Next, we looked at a polymorphism in TPH and performed a meta-analysis on altogether 898 patients and 1179 controls, in addition to our local association study, and provided strong evidence for an association of suicide-related behavior with an A218 SNP in the TPH gene. Interestingly, A218-carriers showed higher scores for State Anger, Trait Anger and Angry Temperament suggesting that the association is related to these personality traits. While the 5-HT1B gene is unlikely to play a major role in the genetic susceptibility to suicide attempts, variations in the 5-HT2A may be associated with non-violent suicide attempts and with higher scores on trait scales of the State-Trait-Anger-Expression Inventory, especially on the scale Trait Anger and its Angry Reaction component. In a next step we proceeded further to catecholaminergic genes and looked at the catechol-O-methyltransferase (COMT), an enzyme involved in catecholamine inactivation. The low-activity variant was over represented among violent suicide attempters consistent with the observation that LL-carriers expressed their anger more outwardly.

S39.04

Topic to be advised

A. Rotundo*. *Sezione di Psichiatria, Pisa, Italy*

S39.05

Suicidal behavior: Interaction between tryptophane hydroxylase and serotonin transporter genes

F. Bellivier^{1,2,*}, Ph. Courtet³, F. Slama^{1,2}, J.L. Laplanche⁴, F. Mathieu², M. Leboyer^{1,2}, A. Malafosse⁵ ¹*Service de Psychiatrie, Hôpital Henri Mondor et Albert Chenevier, Assistance Publique-Hôpitaux de Paris, Créteil*, ²*Unité Neurobiologie et Psychiatrie (INSERM U513), Faculté de Médecine de Créteil*, ³*Service de Psychologie Médicale, Hôpital Lapeyronie, Montpellier*, ⁴*Laboratoire de Biochimie et de Biologie Moléculaire, Hôpital Lariboisière, Assistance Publique-Hôpitaux de Paris, France*, ⁵*Division de Neuropsychiatrie, Hôpital Belle-Idée, H.U.G. Genève, Switzerland*

The serotonin transporter (5HTT) and the tryptophane hydroxylase (TPH) genes code for key proteins involved in the serotonin system and are major candidate genes in association studies of suicidal behavior. We tested the implication of these two candidate genes and their interaction in suicidal behavior. A functional polymorphism of the 5HTT gene (a 44 bp insertion/deletion in the 5HTT-linked polymorphic region (5-HTTLPR)) and the intron 7 TPH A218C polymorphism were studied in a population of 1048 patients with or without suicidal behavior and 433 control subjects. Both polymorphisms were associated with suicidal behavior, in particular with violent suicide attempt. In addition, subjects carrying the two vulnerability genotypes were significantly under-represented in patients with violent suicidal behavior, suggesting a possible selective effect of these genotypes. The associations between suicidal behavior and both the TPH and the 5HTT genes were replicated. The analysis of the interaction between these two vulnerability factors suggest a possible selection due to increased mortality in suicidal patients carrying both vulnerability genotypes. Alternative interpretation are discussed.

S58. Symposium: Neurotoxicity of Stress

Chairpersons: Daniela Jezova (Bratislava, Slovak Republic), Joseph Zohar (Tel Hashomer, Israel)

08:30 – 10:00, Hall D

S58.01

Corticosteroids and brain structure

T. Hajek^{1,2,*}, M. Kopecek¹, M. Alda², C. Hoschl¹. ¹*Prague Psychiatric Center and 3rd School Of Medicine, Charles University, Czech Republic*. ²*Department of Psychiatry, Dalhousie University, Halifax, NS, Canada*

Corticosteroids lead to structural changes and even loss of hippocampal neurons in rats and primates. Hippocampus is necessary for short-term memory consolidation. Memory deficits in combination with decreased hippocampal volume are often reported in disorders associated with stress or elevated levels of cortisol (mood disorders, posttraumatic stress disorder, Cushing's syndrome) and they are considered a result of putative neuronal damage mediated by corticosteroids. The evidence for an association between hippocampal volume decrease and corticosteroids in human subjects will be reviewed as well as the results of our pilot prospective study investigating hippocampal volume and function in human patients treated with high doses of exogenous corticosteroids, where we failed to observe changes in hippocampal volume after up to average 6 months of treatment with exogenous synthetic corticosteroids. Unresolved questions concerning causality, reversibility, and type of hippocampal changes due to corticosteroids will be discussed.

S58.02

Predictors of posttraumatic stress disorder

J. Zohar*. *Department of Psychiatry, Chaim Sheba Medical Center, Tel Hashomer, Israel*

Abstract not received

S58.03

Glutamate in relation to stress and drug action

D. Jezova*, A. Makatsori, R. Duncko, M. Schwendt. *Laboratory of Pharmacological Neuroendocrinology, Institute of Experimental Endocrinology, Slovak Academy of Sciences, Bratislava, Slovak Republic*

Stress stimuli are inducing changes in many central neurotransmitters involved in psychotropic drug action. Glutamate, a neurotransmitter with excitatory but also neurotoxic properties, is associated with several brain disorders. We have shown stress-induced changes in gene expression of ionotropic glutamate receptor subunits in selected brain regions. In chronic stress situations, mainly alterations in mRNAs coding for subunits of AMPA receptor subtype were observed. Endogenous glutamate released during stress participates in the control of stress hormone release, e.g. ACTH, prolactin and catecholamines. Glutamate receptor blockade resulted in an inhibition of neuroendocrine response during stress showing specific changes, which depended on the stress stimulus used. Our

studies in animal models revealed changes in gene expression and functional significance of glutamate receptors in situations simulating symptoms of mental disorders, such as compulsory wheel running or spontaneous anhedonia. In humans, only high doses of glutamate induced stress hormone release. Administration of lamotrigine, a drug used in the treatment of bipolar disorder known to inhibit glutamate release, affected hormone secretion during psychosocial stress, as we have shown in a double-blind study in healthy men. In general, prolonged exposure to stressors induce long-term changes in gene expression and subunit composition of glutamate receptors, which may contribute to negative consequences of stress including psychiatric symptomatology. Correspondingly, glutamate receptors could be a target of drug action for the treatment of stress-related disorders. The study was supported in part by grants of VEGA 2/2007 and of European Commission ICA1-CT-2000-70008.

S34. Symposium: Psychiatrie Pénitentiaire en Europe

Chairpersons: Gerard Niveau (Geneva, Switzerland),
Bruno Gravier (Lausanne, Switzerland)
08:30 – 10:00, Hall E

S34.01

La prise en charge psychiatrique des détenus en exécution de peine en Suisse: une pratique aux confins de la clinique

B. Gravier*. *Privat Docteur et Maître d'Enseignement et de Recherche, Université de Lausanne, Chef du Service de Médecine et de Psychiatrie Pénitentiaires, Switzerland*

La Suisse, dans son nouveau code pénal a renforcé et précisé les obligations de traitement dans un contexte pénitentiaire ou judiciaire. Le législateur entérine ainsi une disposition qui permet à une autorité judiciaire de poser des indications de soin là où un travail thérapeutique semblerait impossible. Mais de quel soin s'agit-il? En effet le législateur entend demander au justiciable de s'engager dans un travail qui permettrait une remise en question fondamentale de son fonctionnement psychique. Pourtant, la plupart du temps, les experts restent très mesurés quant à de telles possibilités. Le risque est grand de voir se multiplier de pseudo demandes en réponse à des indications reposant plus sur les besoins d'un plan d'exécution de peine que sur une véritable évaluation clinique. Peut-t-on alors proposer un véritable travail psychothérapeutique ou doit-on se limiter à un accompagnement symptomatique? Peut-on envisager un travail sur la violence interne du sujet sans que la prise en compte de celle-ci ne soit entendue que comme incapacité à pouvoir la contrôler. Le rêve d'une interdisciplinarité passe nécessairement par la 'conflictualité constructive' entre soignants et garants de l'exécution de la peine. Par contre - et c'est le paradoxe d'une situation qui ne définit la clinique que par des déterminants extérieurs au sujet - c'est bien cet entrecroisement qui pourrait permettre d'organiser finalement une rencontre potentiellement thérapeutique avec ces détenus qui organisent leur monde relationnel dans une perversion de la rencontre. C'est aussi le défi dans lequel se joue l'avenir de la psychiatrie pénitentiaire.

S34.02

La psychiatrie en milieu pénitentiaire en France: impuissance ou toute puissance?

P. Lamothe*. *Centre Hospitalier Le Vinatier, Bron, France*

A travers les trois temps historiques de la psychiatrie en milieu pénitentiaire se dégagent ses limites et ses risques qui survivent aux changements réglementaires. La collaboration au projet d'exécution de peine, la 'psychiatriation' du comportement et des problèmes de discipline, le partage d'information, les limites du consentement au soin, la participation aux mesures post-pénales ou de défense sociale sont les points clés qui sollicitent actuellement notre réflexion éthique. Sous la pression des patients et des institutions, le psychiatre en milieu pénitentiaire oscille en permanence entre deux positions 'grandioses' au sens psychodynamique: le splendide isolement avec repli par et dans la technique et l'intégration multidisciplinaire où se perd le sens de sa position avec le dévoiement de la parole du détenu. La responsabilité du psychiatre que certains refusent et à laquelle les médias et l'administration voudraient donner une place parfois exorbitante (par exemple, dans la gestion des conduites suicidaires en détention) est au centre du débat d'idées actuel: entre l'irresponsabilité ('ils ont les mains propres mais ils n'ont pas de mains') et la responsabilité de tout, quelques cas concrets permettent d'alimenter la réflexion et de placer des jalons pour travailler sereinement.

S34.03

Psychopathology in prison context

L. Loretto*, P. Milia, G.C. Nivoli, A. Nivoli. *Clinica Psichiatrica, Sassari, Italy*

Authors analyzed the prison reality and the clinical and psychopathological characteristics of the patients inside a penitentiary institutions and report a series of different Syndromes that is possible to observe in specific prison contexts.

They discuss, through clinical examples, the psychopathological aspects in parasuicide, self-injuring, homosexual and pseudo-homosexual panic, separation and control in female homosexuality, "entrance-trauma" and "leaving-vertigo", regressive behaviours etc.

Moreover, authors underline the importance in a prison context of a specific, complete intervention oriented on various levels: 1) adequate assessment and treatment of the psychopathological condition; 2) treatment of violent behaviour.

S34.04

Bases biologiques de l'agressivité et implications pharmacologiques

A. Dailliet*. *Défense Sociale, Centre Hospitalier Psychiatrique 'Les Marronniers', Tournai, Belgium*

Depuis 25 ans environ, la sérotonine a été impliquée comme neuro-modulateur dans le contrôle des comportements impulsifs et violents ainsi que dans les comportements suicidaires. Différentes mesures de la sérotonine ont donné des résultats contrastés mais qui, pour l'homme adulte, sont concordants avec le fait que le fonctionnement sérotonergique est diminué chez les personnes agressives et impulsives, notamment qui présentent un trouble de la personnalité. L'exposé présentera un résumé des études disponibles sur le lien

entre sérotonine et comportement violent et impulsif. On développera aussi un aspect particulier: le rôle respectif des récepteurs 5-HT1A et 5-HT2A dans le comportement de violence. Ce modèle permet d'élaborer un choix thérapeutique plus adéquat pour la prise en charge pharmacologique des personnes délinquantes dont la tendance à la violence impulsive constitue la problématique, comme c'est le cas dans certaines pathologies: trouble explosif intermittent, trouble de la personnalité antisociale ou borderline, ou encore certaines formes de schizophrénie. Les différentes formes de traitement appliquées dans cette problématique chez des personnes délinquantes internées en vertu de la loi belge dite de 'Défense Sociale' seront expliquées en pratique.

S34.05

Action of the Committee for the prevention of torture in the field of psychiatry

G. Niveau*. *Service de Médecine Pénitentiaire, Département de Médecine Communautaire, University Hospitals of Geneva, Switzerland*

The Committee for the prevention of torture and inhuman or degrading treatment or punishment (CPT) is in charge, since 1989, of visiting places of detention in Europe. Different kinds of psychiatric hospitals are part of these places: general psychiatric hospitals with non voluntary patients, psychiatric sections of prisons or security hospitals. From his first visits to the end of 2001, the CPT published 94 reports concerning psychiatric places. A lot of Human Rights violations have been observed, in the following fields: ill-treatment, living conditions, psychiatric treatment, staff resources, means of restraint, information and safeguards. We sum up the standards that the CPT has proposed in 1998, relating to the respect of Human Rights in involuntary placement in psychiatric establishments.

S34.06

Le rôle et la place du Comité Européen pour la prévention de la torture (CPT) en psychiatrie et dans la prise en charge sanitaire des personnes détenues

C. Orizet*. *Conseil de l'Europe, Comité Européen pour la Prévention de la Torture et des Peines ou Traitements Inhumains ou Déggradants, Strasbourg, France*

L'article 3 de la Convention européenne des Droits de l'Homme établit que 'nul ne peut être soumis à la torture ni à des peines ou traitements inhumains ou dégradants'. La situation particulièrement vulnérable des personnes privées de liberté a conduit le Conseil de l'Europe à adopter en 1987 la Convention européenne pour la prévention de la torture et des peines ou traitements inhumains ou dégradants, convention instituant le Comité du même nom (le 'CPT'). Celui-ci est chargé, dans tous les Etats Parties à la Convention (44 en novembre 2003), d'effectuer des visites dans tout lieu où des personnes sont détenues ou retenues par une autorité publique (prisons, postes de police, centres de rétention pour étrangers, casernes militaires, hôpitaux psychiatriques, etc.). Lors des visites, le CPT bénéficie de pouvoirs étendus, tel que se rendre à son gré dans tout lieu de privation de liberté et de s'y déplacer sans entrave. A l'issue de chaque visite, le CPT adresse un rapport confidentiel à l'Etat concerné, exposant les faits constatés et comportant, si nécessaire, des recommandations et d'autres conseils en vue de renforcer la protection des personnes privées de liberté contre les mauvais traitements. Après une présentation du CPT, l'auteur se propose

d'exposer, dans un premier temps, comment les experts du Comité procèdent à l'évaluation d'un hôpital psychiatrique accueillant des patients sous contrainte, ainsi qu'à celle d'un service médical dans un établissement pénitentiaire. Puis, dans un second temps, seront décrites les normes établies en ces domaines par le Comité.

W02. Workshop: Developing Professional Skills of Psychiatrists

Chairpersons: Norman Sartorius (Geneva, Switzerland), Hannes Helmchen (Berlin, Germany)

08:30 – 10:00, Hall F

W02

Developing professional skills of psychiatrists

C. Höschl^{1,*}, N. Maric², A. Mihai³, N. Sartorius⁴. ¹Prague Psychiatric Centre, Czech Republic. ²UKC, Belgrade, Serbia & Montenegro. ³Department of Psychiatry, University of Medicine, Tg. Mures, Romania. ⁴Hôpital Universitaire de Genève (HUG), Switzerland

Professional skills such as presentations at congresses, producing posters, writing grant applications and so on are rarely taught to postgraduate students in psychiatry and young psychiatrists. A series of successful workshops importing such skills have been held in Berlin, in various countries of Central Europe and outside Europe, e.g. Japan and Latin America. A presentation of these workshops should serve as a basis for a discussion about best ways of providing professional skills to psychiatrists.

Free Communications: Addictive Disorders

08:30 – 10:00, Hall G

DOVER and QUVER: New markers to screen for or monitor at-risk drinking

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Background: The objective identification and follow-up of people with alcohol-related problems remains problematic. To date the performance of available markers is limited. It has been suggested in the past to combine or transform laboratory results to optimize the validity of the testing. We examined the power of a combination of g-glutamyltransferase (GGT) with %CDT (carbohydrate-deficient-transferrin) in a sample from primary care practice.

Methods: 1552 consecutive patients of 29 general practitioners filled in the WHO-AUDIT (Alcohol Use Disorders Identification Test). The general practitioners (GP) also assessed the alcohol use of patients. GGT was measured by a local laboratory, %CDT was

measured using the Axis-Shield %CDT-TIA-Mikrotiter method. %CDT and GGT were combined in two regression models. One patient-based (QUVER) one physician-based (DOVER) verification data.

Results: Discriminative properties of QUVER and DOVER were analysed using ROC-curves. Concerning sensitivity and specificity AUDIT (>8) served as indicator for at least at risk alcohol abuse and AUDIT >16 as indicator of harmful and dependent alcohol consumption respectively. Results were as followed: table 1.

Conclusion: The discriminative properties of both markers proved to be excellent. Hence, they are useful tools in detection and monitoring patients with at risk or harmful alcohol consumption.

Audit >8			
Marker	Cut-Off	Sensitivity	Specificity
DOVER	6,85	90%	41%
	8,33	70%	74%
	8,85	47	90%
QUVER	7,07	90%	46%
	8,34	77%	70%
	10,00	50%	90%
Audit >16			
Marker	Cut-Off	Sensitivity	Specificity
DOVER	8,05	91%	61%
	8,77	78%	85%
	9,00	70%	90%
QUVER	7,09	91%	42%
	9,96	83%	86%
	10,54	74%	90%

Impact of gender for the pharmacological abstinence maintenance treatment of alcoholism

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Recent data support that genetic background, onset and outcome differ markedly between female and male patients suffering from alcoholism (Cloninger et al. 1996, Mann et al. 2000). However, studies dealing systematically with the interaction of gender and therapeutic intervention remain rare. Especially the observation of gender effects in pharmacological relapse prevention trials with acamprosate and naltrexone might be helpful, since distinct neurobiological systems were tackled (glutamatergic system, opioidergic system) helping to interpret possibly differential effects on the maintenance of abstinence in females and males. Based on this, we analysed the data of the first controlled trial comparing and combining acamprosate and naltrexone in the relapse prevention of alcoholism (Kiefer et al. 2003) with respect to the interaction of gender and outcome. Data show marked differences in abstinence duration especially in the naltrexone group between females and males.

Description of a sub group of a population treated for alcohol dependency presentation a resistance to withdrawal of benzodiazepines after 6 months of treatment

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This longitudinal study recruited 136 alcohol dependent patients treated in an outpatient specialised care centre for alcohol depen-

dency of the Department of Psychiatry, from 1997 to 1999. The aim was to study the demographic, psychosocial and psychopathological characteristics of the sub group which presented a dependency to benzodiazepines even after 6 months of treatment. The data studied are extracted from the SAMBAD (Ambulatory Statistics in the domain of alcohol and drugs) questionnaire, the ASI (Addiction Severity Index), the ICD-10 as well as the Hamilton Depression and Anxiety scales. Conclusions: The demographic, the psychosocial characteristics, the severity of the ASI score and the severity of the Hamilton anxiety scale did not have an incidence on the benzodiazepines dependence. However, we found an incidence with 30,2% patients of the sub group who scored highly in the beginning of their treatment according to the Hamilton depression scale and presented a lifetime diagnosis of depression according to the ICD-10 criteria. The difficulties arising from benzodiazepines withdrawal in this sub group of institutional population incites us to look for and treat a state depression more efficiently.

The role of alcohol and drugs in homicide in England and Wales

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Background review: Homicide is increasing in England and Wales. This may be linked to a rise in alcohol and drug misuse.

Aims: To examine rates of alcohol and drug misuse/dependence in people convicted of homicide, particularly in those with mental illness, and the role alcohol and drugs played in the offence and sentencing.

Methods: A national clinical survey of people convicted of homicide in England and Wales between 1996-1999. Detailed clinical data were collected on perpetrators with prior psychiatric contact. Results: 1,594 homicides were reported to the Inquiry. Forty-one per cent were misusing alcohol and 40% misusing drugs (most often cannabis and heroin). In 416 (45%) of all cases, alcohol was considered to have contributed to the offence, drugs contributed in 144 (15%). Perpetrators in whom alcohol or drugs played a part were less likely to have a serious mental illness but more likely to have co-morbid personality disorder. Their victims were more often male and strangers. Outcome in court was less likely to be diminished responsibility or hospital orders. In 282 (18%) of all cases, contact had been made with psychiatric services. Rates of current alcohol and drug dependence and misuse were higher in these perpetrators. Those with an additional diagnosis of schizophrenia or affective disorder were more likely to receive a hospital order.

Conclusions: There are high rates of alcohol and drug misuse in perpetrators of homicide. Improved services for drug and alcohol misuse could help to reduce the level of risk, and may ultimately reduce homicide rates.

Locus of control and pathological gambling: Implication for clinical practice

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Clinical observations suggest that gamblers attribute the outcomes of the games to luck (probability that a happy event occurs) more

than to chance (absence of any causal relation between events). The locus of control construct is concerned with the perceived causal relation between a subject's action and the result. Levenson's locus of control measures three scales: Internality (I), externality related to Powerful others (P) and externality related to Chance (C). The aim of our study was to test if pathological gamblers have higher scores on the C scale compared to the general population. On the other hand, the P and I scales should not be able to distinguish the two populations.

Method: 47 pathological gamblers according to the SOGS (South Oaks Gambling Screen) and the DSM-IV completed the locus of control questionnaire, IPC by Levenson. We compared the scores with the general population, taking into account sex and age.

Results: Pathological gamblers had significantly higher scores on the C scale [$t(46)=3.0;p=.003$]. Not any significant difference neither on the P scale [$t(46)=.02;p>.05$] nor on the I scale [$t(46)=-1.05;p>.05$].

Discussion: In support with our initial hypothesis, the pathological gamblers had higher Chance scores. On the Powerful others and the Internal scales no difference was observed between pathological gamblers and the general population. This psychometric study confirms the importance of the cognitive work concerning chance and luck, and the need to further explore the attribution to luck or chance as a risk factor for pathological gambling.

Risk factors for polysubstance abuse in adolescent girls: Cross-sectional study

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Adolescence is the high-risk period for experimentation with psychoactive substances, and addictive disorders have their onset in this age. Early initiation of use of legally accepted substances may play a role in polysubstance abuse. Genetic factors may increase the risk of abuse of drugs probably due to the effect on temperamental and character dimensions of personality. We assess whether personality dimensions, age of initiation of alcohol and tobacco use, depressive symptoms and socio-economic status influence the risk of polysubstance abuse in girls. Female adolescents ($n=144$; age: 17.9 ± 1.4 , range 17-19) were assessed with self-report tools assessing personality dimensions (Temperament and Character Inventory), depression (Beck Depression Inventory) and use of psychoactive substances. Basic demographic data were collected. Use of alcohol, tobacco, marijuana, stimulants and hallucinogens were reported respectively by 94.4%, 78.5%, 35.4%, 16.0% and 3.5% of participants. Abstinence, and use of 1, 2, 3 and 4 or more different psychoactive substances were reported respectively by 3.5%, 18.8%, 41.0%, 22.2% and 14.6% girls. Number of used substances was significantly correlated with temperament dimension of novelty seeking and negatively correlated with character trait of cooperativeness. In logistic regression the polysubstance abuse (use of 4 or more psychoactive substances) was associated with high score in novelty seeking (TCI), severity of depression (BDI) and early initiation of tobacco smoking. Dimension of novelty seeking associated with impulsiveness, self-report depressive symptomatology and early initiation of tobacco smoking may act as independent factors increasing the risk of polysubstance abuse in adolescent girls.

S24. Symposium: The Mental Health of Physicians: Do we care for ourselves?

Chairpersons: John Strang (London, UK), Miguel Casas (Barcelona, Spain)

08:30 – 10:00, Hall H

S24.01

To be a doctor. A high-risk factor for burn-out?

B.B. Arnetz*. *Department of Social Medicine, Uppsala University, Sweden*

The mental health of physicians has become of increasing concern for researchers, health care managers, as well as patients. A number of papers indicate that doctors are at increased risk to commit suicide. They also seem to be one of the most stress-prone professions in health care. Recent changes in the financing, structure and organisation of health care have increased physician stress at the same time as their mental energy has decreased. In a number of studies, including a 10-year prospective study of physicians at a university hospital, we have studied the health and well-being of physicians. The likelihood of suffering from burn-out and low mental energy increased as resources were reduced. However, organisational interventions and improved management counteracted the development of burn-out. It is suggested that the mental health and well-being of physicians should be followed more in detail as health care changes. There is a need both for an individual and organisational strategy to prevent burn-out and loss of mental energy. Strategies need to consider optimal work load, career development, as well as reasonable work hours and rest periods.

S24.02

Mental health problems among physicians

O.G. Aasland^{1,2,*}. ¹The Research Institute, The Norwegian Medical Association. ²Institute of Health Administration, University of Oslo, Norway

The health of doctors is an interesting parameter. On one hand it represents the best of what can be expected in a population with full information about risk factors and easy access to treatment. On the other hand, doctoring 'may be hazardous to your health', with possible elevated physiochemical, bacteriological and psychosocial risks. In a historical perspective, doctors had a higher mortality than comparable groups up to 1950, mainly due to contagious disease. Presently doctors in most countries enjoy a lower mortality than what is seen in the general population, with the notable exception of death by suicide. General morbidity is also lower among doctors, particularly when measured as sickness absence from work. Due to the observed elevated suicide risk, as well as what has been described as 'loss of professional autonomy' or 'fall from the pedestal', there is an increasing interest in the mental health of doctors. A picture of a victimised altruistic doctor in a hostile world of exploitation and litigation has been constructed, mainly by the profession itself. 'Unhappy doctors' has become a major theme in professional medical journals. In this presentation I will review the available evidence about the mental health of doctors, and discuss to what extent such problems may be caused or amplified by their work. I will show that their psychiatric morbidity does not differ substan-

tially from what is seen in the general population, but that doctors as potential or actual patients run into some additional problems.

S24.03

Psychopathology in psychiatrists. Are we different from the rest of physicians?

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¹Inpatient Unit, Integral Care Program for Sick Physicians.
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Introduction: Mental health of physicians is a cause of concern and has led to the development of impaired physicians programs. There's a general belief that psychiatrists may be one of the highest risk groups among physicians, but so far no evidence has been reported.

Method: 14 out of 224 consecutive admissions at the Impaired Physicians Inpatient Unit of Barcelona (Spain) were psychiatrists. 154 inpatients had various medical specialties, while 24 were not specialized yet and 32 were nurses. Psychiatrists have been compared to the rest of specialists concerning social and demographic data, diagnosis and evolution.

Results: No differences were found concerning gender, age and civil status. Psychiatrists tended to be diagnosed more often of alcohol dependence (78,6% vs. 49,4%; chi-square 4,389; $p < 0.033$) and cocaine dependence (21,4% vs. 5,8%; chi-square 4,699; $p < 0.030$). No differences were found concerning the rest neither of drugs, nor in the prevalence of schizophrenia, bipolar disorder, dystimia, major depression and personality disorders. No differences were found with the Millon Clinical Multiaxial Inventory. Finally, 57% of psychiatrists have needed more than one hospitalisation (vs. 23,5% of the rest of specialists; chi-square 7,468; $p < 0.011$). The number of inpatient treatments was also higher in psychiatrists (2,00 vs. 1.32; t-test 3,185, $p < 0.002$).

Discussion: Compared to the rest of specialists, psychiatrists show a higher prevalence of addictive behaviours, especially alcohol dependence and tend to need more than one treatment. While psychiatrists may be seen as 'difficult' patients, special attention should be paid during training years to the issue of alcohol and drugs use.

S24.04

Stress and depressive symptoms in physicians and medical students in Sweden

B. Runeson^{1,*}, M. Dahlin¹, M. Åsberg², A. Nygren³. ¹Department of Clinical Neuroscience, Karolinska Institutet, Psychiatry Section, St. Görans Hospital. ²Department of Clinical Neuroscience, Karolinska Institutet, Psychiatry Section/Karolinska Hospital. ³Department of Clinical Neuroscience, Karolinska Institutet, Personal Injury Prevention Section, Stockholm, Sweden

Swedish physicians have low rates of sick leave compared to other professions. Since 1998, long-term sick leave in physicians has, however, increased steadily. More than 40 per cent is due to a psychiatric disorder, mainly depressive disorder, mental exhaustion or related conditions, according to sick leave certificates. Female physicians had almost three times higher rates of long-term sick leave than males. The rate was highest among 41-50-year-olds. There is deep concern about this situation among Swedish doctors, and in their professional organizations. The increasing in long-term sick leave is a general phenomenon in Sweden, and has created considerable strain on the country's economy. The reasons for it are much debated, but

not well understood. The development of psychiatric problems in doctors may begin already during the medical studies. We gave questionnaires to medical students at the Karolinska Institute at semester 1, 6 and 11. The response rate exceeded 90 per cent. Subjects with indications of stress or depressive symptoms were then interviewed. Medical students showed more depressive symptoms than age- and sex-matched population controls, 13% vs. 9%. Female students had a slightly higher rate of depressive symptoms than males. Sources of stress were most often related to the studies but differed at different stages. Depressive symptoms were common in the first semester, and lower towards the end of studies. The perceived lack of feed-back from teachers in the entire sample, 80%, calls for attention. All three student cohorts will be followed during their studies, including their first year as physicians.

S24.05

A longitudinal study of work stress and mental health among Norwegian physicians

R. Tyssen*. Department of Behavioural Science Medicine, Faculty of Medicine, University of Oslo, Norway

Aim: To summarize findings from a 10-year longitudinal study of Norwegian young physicians on mental health and work stress.

Methods: Prospective survey of a nationwide cohort (N=631) of medical students that graduated in 1993 and 1994 (T1); they were approached again at the end of the first postgraduate (internship) year (T2), in their third/fourth postgraduate year (T3), and finally in 2003 when being in their ninth/tenth postgraduate year (T4). A slight majority were women. Response rates were 58-83%. The outcome variables included perceived mental health problems and job stress. Predictor variables included personality traits, social support, medical school variables, and measures about working conditions and work places at the postgraduate levels. Findings: The prevalence of mental health problems in need of treatment during the preceding year increased significantly from T2 (11%) to T3 (17%), and it stayed higher at T4 (22%). A substantial portion had not sought professional care. There was little difference between the genders, but the work-related stress was on a higher level among women among the senior house officers at T3, and it remained higher also at T4. Compared with the general population suicidal ideation was relatively common, and the level of life satisfaction was low. The presentation will give an outline of individual and contextual factors that are associated with mental health outcome. It will comprise results from already published or accepted papers, but it aims to provide further preliminary findings from the T4-data.

S78. Symposium: Adolescent Suicide

(Organised by WPA Section of Child and Adolescent Psychiatry)

Chairpersons: Sam Tyano (Petach Tikva, Israel), Barry Nurcombe (St. Lucia, QLD, Australia)
08:30 – 10:00, Hall I

S78.01

Suicide in youth: A European perspective

D. Wasserman^{1,2,3,*}. ¹Swedish National Centre for Suicide Research and Prevention of Mental Ill-Health (NASP). ²National

Institute for Psychosocial Medicine. ³*Karolinska Institute and Stockholm County, Sweden*

Increasing youth suicide rates, especially among males, constitute a major public health problem in Europe. In the past two decades motor accident fatalities have been decreasing while suicide, especially among young males, has been increasing. Trends in adolescent suicide rates in Europe will be presented along with a discussion of reasons for increasing suicidal behaviour. Reliability of suicide statistics will be scrutinized. Strategies in suicide prevention pursued through the health care services (health-care perspective) and directed at the general population (public-health perspective) will be presented, along with existing evidence which shows the benefits and effects of suicide preventive activities (Wasserman D (ed). *Suicide - An unnecessary death*. London, Martin Dunitz 2001). Questions of suicide are surrounded by taboo and feelings of shame and guilt. Ambivalence towards suicide and suicide prevention is mirrored in the scarce resources allocated for suicide research and prevention. Suicide is often seen as a very specific problem or such a complex matter that nothing can be done about it. Although further studies are needed, the existing evidence shows that suicide and attempted suicide can be prevented, which gives both encouragement and hope.

S78.02

Autobiographical memory and adolescent suicidality

A. Apter*. *Department of Psychiatry, Schneider Children's Medical Center of Israel, Petach Tikva, Israel*

Objective: The aim of this study is to examine the relationship between a number of elements and suicidal behavior. These elements - deficits in the ability to retrieve specific autobiographical memories, impairment in interpersonal problem solving, negative life events and hopelessness - all play a major role in Williams' (1996) theory of suicidal behavior.

Methods: Twenty-five suicidal adolescent inpatients were compared to 25 non-suicidal adolescent inpatients and 25 normal controls. Autobiographical memory was tested by a word association test; problem solving by the Means to Ends Problem Solving technique; negative life events by the Coddington Scale; repression by the Life Style Index; hopelessness by the Beck Scale; suicidal risk by the Plutchik Scale, and suicide attempt by clinical history.

Results: Impairment in the ability to produce specific autobiographical memories, difficulties with interpersonal problem solving, negative life events and repression were all associated with hopelessness and suicidal behavior. There were significant correlations between all the variables except for between repression and negative life events.

Conclusions: These findings support Williams' notion that generalized autobiographical memory is associated with deficits in interpersonal problem solving, negative life events, hopelessness and suicidal behavior. The finding that defects in autobiographical memory are associated with suicidal behavior in adolescents may lead to improvements in the techniques of cognitive behavioral therapy for such individuals.

S78.03

Evaluation of the population hospitalized in the Suicidal Adolescent Crisis Unit (UCA) of Geneva: The role of the healthcare network in preventing suicidal behaviours

A. Venturini*, M. Fischer. *L'Unité de Crise pour Adolescents, Geneva, Switzerland*

S78.04

The metapsychology of suicide

I. Manor¹, M. Vincent¹, S. Tyano^{1,*}. *Geha Psychiatric Hospital, Petach Tikva, Israel*

We will try to analyze the unique phenomenon of adolescent suicide according to a few possible conceptions: The oedipal process in both courses which present two different developmental axis: The apprehension of sin as a result of the 'the knowledge' (Sophocles) and the apprehension of sin as a result of 'the will to control' (Euripides). In pathological situations, suicide might evolve from the determined need to control or as a result of concealed information of sexuality, which poisons the psyche from inside. According to the adolescence stances (Vincent) suicide has an important place while shattering of parents' images, the regression into the self and the need for libidinal fulfillment. This narcissistic investment might transfigure in pathological states into suicide. In the animal world, when an animal stands before choosing from the impossible, it might turn to 'The third way' which is many times unpredictable and radical. Projection of this on humanity may suggest that inner human conflicts are solved, many times, using 'The third way' because it bypasses the conflict. In situations where conflict exists and the existence of 'The third way' becomes a need, impulsivity might be a crucial factor when choosing between psychosomatics and suicide. According to archaic conceptions there are clear distinctions made between male and female reference to death, just as they have different thoughts concerning fertility and creating another life. We suggest, that the developmental differences, as much as the leaning on different archetypes in both genders, are the creators of these differences and add to the complexity of the whole suicidal process.

IMS2. Interactive Main Session: The Role of Psychodynamic Psychotherapy in Psychiatric Training and Practice

Chairpersons: Brian Martindale (London, UK), Alain Braconnier (Paris, France)

10:30 – 12:00, Hall A

IMS2

Introduction to the Interactive Main Session "The Role of Psychodynamic Psychotherapy in Psychiatric Training and Practice"

François Ferrero*. *Department of Psychiatry, Geneva University Hospitals, Geneva, Switzerland*

This session will attempt to examine the role of psychodynamic psychotherapy as part of the training of psychiatrists. It is widely accepted that the mind and its psychology are central to the development and treatment of psychiatric disorders. This statement provides a strong argument in favour of psychotherapeutic approaches in general. Some specific psychotherapies (interpersonal and cognitive behavioural) have gained scientific recognition. The status of psychodynamic psychotherapies appears to be a more disputed issue. Recent developments in the domain of neuronal plasticity and a better understanding of the roles of memory and emotions shed new light on the complex processes related to psychological life.

But, is it necessary to take into account psychological paradigms such as transference, counter-transference, resistance and defence mechanisms as described in the psychoanalytical theory? Two colleagues will present the pros and cons of this issue and, at the end of the session, the audience will have the opportunity to vote on some specific questions.

S40. Symposium: European First Episode Studies on Schizophrenia

Chairpersons: Wolfgang Gaebel (Düsseldorf, Germany), Joachim Klosterkötter (Cologne, Germany)
10:30 – 12:00, Hall B

S40.01

European prediction of psychosis study

J. Klosterkötter^{1,*}, M. Birchwood², D.H. Linszen³, S. Ruhrmann¹, R.K.R. Salokangas⁴, H. Graf von Reventlow¹, F. Schultze-Lutter¹ and the EPOS Group^{1,2,3,4}. ¹*Department of Psychiatry and Psychotherapy, University of Cologne, Germany.* ²*Early Intervention Service, University of Birmingham, UK.* ³*Academic Medical Centre, University of Amsterdam, The Netherlands.* ⁴*Department of Psychiatry, University of Turku, Finland*

The long duration of untreated illness in early psychosis calls for intensive efforts for early recognition and early intervention. EPOS is a multi-centre prospective study designed to predict the transition to psychosis and the course of psychopathology and disability in persons with an increased risk for schizophrenia on the basis of a multi-level assessment including psychopathology, neurocognition and brain imaging. The study is co-ordinated by the University of Cologne with participation of psychiatric departments in Amsterdam, Birmingham, Turku, Berlin and Manchester. Together the centres recruit approximately 250 persons at risk for psychosis. The presence of intermittent or attenuated psychotic symptoms, a familial risk of psychosis plus decline in functioning, or subtle self-perceived cognitive and perceptual deficiencies define the at-risk state. Patients with a history of psychotic symptoms for more than one week or with an organic aetiology of the symptoms are excluded. After 9- and again after 18 month participants are contacted and re-assessed. EPOS also studies pathways and obstacles to care and calculates delays to adequate treatment. As another innovative approach, disabilities and quality of life of persons at risk for psychosis are for the first time prospectively assessed to detect the onset, prevalence, and determinants of deficits and needs in these stages. Any interventions, e.g., psychological or pharmacological treatments, offered to persons at risk for psychosis and their outcome are monitored and evaluated prospectively.

S40.02

The European first episode schizophrenia network: Focus on UK first episode studies

S.W. Lewis*. *Department of Psychiatry, University of Manchester, UK*

In England, the NHS is in the process of setting up 50 early intervention services, to be in place by summer 2004. In addition, a National Institute of Mental Health (England) has been established,

involving a mental health research network with an early intervention research group. Recent and current UK studies, including cohort studies and trials of individual interventions and service level interventions in early psychosis, will be reviewed.

S40.03

First episode studies on the German research network on schizophrenia

W. Gaebel*. *Department of Psychiatry, University of Düsseldorf, Germany*

There is evidence that the treatment of schizophrenia patients with new atypical neuroleptics shows better results than treatment with typical neuroleptics, particularly extrapyramidal side-effects can be reduced. On the other hand meta-analyses suggest that atypical and conventional antipsychotics are equivalent on symptom reduction and tolerability if the latter are administered in low dosages. Against that background, a comprehensive acute and long-term treatment study in patients with first-episode schizophrenia has been initiated within the Project Network II of the German Research Network on Schizophrenia. First results of this study suggest that low dose medication can reduce positive symptoms and improve social adjustment. However, results refer to unblinded medication and have to avert the completion of this still ongoing study. As recommended by the current treatment guidelines the patient obtain the study medication over a period of twelve months. In the second year, antipsychotic treatment is randomly either maintained or gradually discontinued. Based on a biweekly assessment of unspecific and specific early warning signs throughout the two years of treatment, a prodrome based early intervention strategy is implemented in the second year of treatment. Initiation of early intervention is triggered by a decision algorithm, which considers prodromal symptoms and other measures with relapse predictive potential. The multi-center studies on first episode schizophrenia patients are completed by sub-projects on psychological treatment strategies, biological basic indicators of relapse, and on functional brain indicators.

S40.04

European First Episode Schizophrenia Trial

R.S. Kahn*. *Division of Neuroscience, University Medical Center Utrecht, The Netherlands*

Second generation antipsychotics have been shown to be at least as effective as the earlier antipsychotics in treating and preventing recurrence of psychosis in schizophrenia without the concomitant emergence of the typical side effects. However, most of the studies comparing the second generation with the older antipsychotics have been conducted in more or less chronic patients with schizophrenia. Another problem is even more pervasive: studies examining drug effects are usually conducted in highly selected samples, excluding patients with dual diagnoses. Thus, the generalized ability of the studies assessing the efficacy of the newer, atypical antipsychotics is limited at best. Indeed, it has been argued that the beneficial effects of the new antipsychotics would fail to materialize when compared with low dose use of typical antipsychotics in (medication-naïve) schizophrenic patients. This issue, however, has not been tested in first-episode schizophrenic patients. These questions still need to be addressed: is the superiority of atypical antipsychotics in regard to outcome evident in a non-selected naturalistic sample of first episode schizophrenic patients; do atypical antipsychotics lead to less

side-effects in first episode schizophrenic patients and are better accepted leading to increased compliance and a reduced relapse rate in these patients? This European study examines these issues. The study compares the one year outcome after treatment with various atypical antipsychotic medications with that of a low dose of haloperidol, as measured by duration of retention to allocated treatment in 500 patients. The study is currently running in more than 10 European countries involving over 30 sites.

S40.05

First episode aspects of the human brain informatics project

G. Sedvall^{1,*}, E.G. Jönsson¹, I. Agartz¹, B. Ekholm¹, H. Hall¹, L. Terenius². ¹Department of Clinical Neurosciences, Section of Psychiatry, Karolinska Institutet. ²Department of Clinical Neurosciences, Section of Experimental Alcohol and Drug Addiction, Karolinska Institutet, Stockholm, Sweden

The HUMAN Brain INformatics project generates data for a relational data base (HUBIN) by characterizing patients with schizophrenia and healthy subjects using a multidimensional approach. Molecular genetic, early environmental, clinical phenotypic, brain morphological (MRI) and neuropsychological variables are recorded for each subject. The project aims at exploring the etiology and pathophysiology of schizophrenia. HUBIN currently represents about 700 patients with schizophrenia and a similar number of healthy control subjects. All subjects gave informed consent, donated DNA, and gave permission to include data into the data base after coding. In patients with a family history of schizophrenia, a five marker haplotype of the gene for dysbindin (DTNBP1) occurred in a frequency of 17,8% as compared to 3,1% in controls ($P < 0,00153$) (VanDenBogaert et al, AmJHumGen, in press). A genome-wide linkage study in the Swedish sib-pairs with schizophrenia combined with sib-pairs from UK and US, indicates linkage to chromosome 10q25.3-q26.3 with a lod score of 3.87 (Williams et al, AmJHumGen). As compared to controls, a selective volume reduction of the cerebellar vermis, particularly the posterior superior lobe was found in subjects with schizophrenia. The vermian change was not related to age or length of disorder and may represent an early pathophysiological correlate to schizophrenia (Okugawa et al, AmJPsychiat 2003). HUBIN predominantly represents chronic cases. It should be interesting to examine how these HUBIN findings may be replicated and used for prediction of disease course in first episode schizophrenia. The possibility to use the EUFEST material for such purposes will be discussed.

S32. Symposium: Geriatric Neuropsychiatry: Association between Depression and Dementia

Chairpersons: Lars Kessing (Copenhagen, Denmark), Flemming Morkeberg Nilsson (Copenhagen, Denmark)

10:30 – 12:00, Hall C

S32.01

Does exercise prevent depression in patients with Alzheimer's disease?

C. Regan¹, G. Livingston¹, Z. Walker¹, C. Katona^{2,*}. ¹Department of Psychiatry and Behavioural Sciences, University College London. ²Kent Institute of Medicine and Health Sciences, University of Kent, UK

Background: There is a high prevalence of depression in Alzheimer's disease (AD; 20-50%) but relatively little evidence as to factors increasing risk or protecting against depression in this population.

Aims: The primary aim was to investigate whether exercise is associated with a decreased prevalence of depression in AD after allowing for other associated risk factors. The specificity of exercise (rather than general level of activity) was also examined.

Methods: We interviewed 224 people with AD (selected to be representative of the AD population in terms of disease severity) and their carers. Exercise was classed as absent, moderate or vigorous.

Results: 131 participants did not exercise, 66 did moderate exercise and 19 took vigorous exercise. 47 (21.9%) of participants were depressed. 9 (19.1% of those who were depressed) participants who took moderate level of exercise were depressed compared to 38 (80.9%) who were sedentary ($X^2 = 10.273$, $p = 0.001$, odds ratio (OR) = 2.740, CI: 1.397 - 5.372). None of the 19 people who took vigorous exercise were depressed. Taking part in other hobbies or activities was also protective against depression (U value = 3232.0, $p = 0.020$). The independent predictors of depression in AD were: graded exercise (negative) ($p < 0.001$, OR = 0.244, CI = 0.112-0.531), living alone ($p < 0.05$, OR = 3.022, CI = 1.291-7.070), taking an antipsychotic ($p < 0.01$, OR = 3.517, CI = 1.503-8.227) and taking a cholinesterase inhibitor ($p < 0.05$, OR = 2.427, CI = 1.100-5.352).

Conclusion: Taking regular exercise may offer specific protection against depression in AD.

S32.02

Incidence of depression in dementia

D. Aarsland*. *Psychiatric Clinic, Rogaland Central Hospital, Stavanger, Norway*

Many studies have explored the frequency of depression in patients with dementia. The findings have varied widely, with prevalence rates ranging from 8-66%. Methodological factors, which contribute to such variations, include the methods of diagnosing depression, definitions of cases, diagnostic criteria for dementia and sample selection. There are no studies analysing the incidence of dementia and depression. Studies reporting the incidence of depression in patients with dementia are few and have yielded mixed results. Estimates of the annual incidence of major depression varied from 0-10.6%, and of other types of depression from 6-30%. The presentation will review the available evidence for the incidence of depression in dementia sufferers and discuss the potential influence of methodological factors for the different results reported.

S32.03

Increased risk of developing depression (and mania) in patients with dementia?

F.M. Nilsson*. *Rigshospitalet Copenhagen University Hospital/Rigshospitalet, Department of Psychiatry O 6233, Copenhagen, Denmark*

Purpose: To study the time relation between dementia and major affective disorders.

Method: Register linkage study of Danish Hospital Register and Danish Psychiatric Central Research Register. Patients with dementia and control groups (osteoarthritis or diabetes) - at first discharge from hospital were subjects of follow-up for up to 21 years. The hazard of death was taken into consideration by the use of competing risks models. Time from discharge with dementia or control diagnoses, until first readmission with affective disorder was the outcome measurement.

Results: 227 694 patients were discharged from hospital with one of the index diagnoses from 1977 to 1997. Patients with dementia had an increased risk of developing major depressive or manic episodes during the course of the illness. The incidence remains elevated throughout the course of illness.

Conclusion: The results point towards a neuropathological connection between dementia and affective disorder and suggest an aggressive treatment approach of affective disorder in patients with dementia.

Keywords: Depression, mania, dementia, registry.

S32.04

Increased risk of developing dementia in patients with depression?

L.K. Kessing*. *Department of Psychiatry, University Hospital of Copenhagen, Rigshospitalet, Copenhagen, Denmark*

Findings from epidemiological studies suggest that depression or depressive symptoms may be a risk factor for development of cognitive decline or dementia. However, the risk of developing dementia has only been investigated scarcely for patients with depressive disorders. Results for three prospective long-term register studies of patients with depressive disorder are presented. Patients previously discharged from psychiatric hospitals with a diagnosis of single or re-current depression had increased risk of getting a diagnosis of dementia on readmission compared to patients with a diagnosis of neurosis and compared to the general population or compared to patients with a diagnosis of osteoarthritis or diabetes. Additionally, the risk of dementia was found to increase with every new depressive episode leading to readmission.

S32.05

Is depression a risk factor for dementia or cognitive decline?

A.F. Jorm*. *Centre for Mental Health Research, Australian National University, Canberra, Australia*

Objective: This talk presents a meta-analysis of the data on history of depression as a risk factor for dementia. It also considers the available evidence on the hypotheses proposed to explain the association between history of depression and dementia.

Method: A meta-analysis was carried out on results from seven case-control and six prospective studies. A qualitative review was carried out on the evidence related to the hypotheses to explain the association.

Results: The meta-analysis found evidence to support an association from both case-control studies (estimated relative risk 2.01; 95% CI 1.16-3.50) and prospective studies (estimated relative risk 1.87; 95% CI 1.09-3.20). However, the evidence did not clearly support any one hypothesis explaining the association. The most likely contenders are: (1) depression can be an early prodrome of dementia, (2) depression brings forward the clinical manifestation of dementing diseases, and (3) depression leads to damage to the hippocampus through a glucocorticoid cascade.

Conclusions: The possibility that history of depression is a risk factor for dementia needs to be taken seriously and explanations of the association need to be further researched.

S08. Symposium: Stress and Quality of Life

Chairpersons: Per Bech (Hillerød, Denmark), Brian Leonard (Galway, Ireland)

10:30 – 12:00, Hall D

S08.01

The HPA and immune axes in stress and depression

B.E. Leonard*. *Department of Pharmacology, University of Galway, Ireland*

The relationship between psychiatric illness and the immune system was first described by the Nobel Laureate Wagner-Jauregg in 1927. Since then, clinical and experimental evidence has accumulated to show that, in major depression, there is an increase in the release of pro-inflammatory cytokines (such as IL-1, -6, TNF and IFN) from macrophages and monocytes in the blood and from astrocytes and microglia in the brain. Other inflammatory mediators such as PGE2 are also elevated in the brain while the anti-inflammatory cytokines (IL-4 and 10) are decreased. Both IL-1 and CRF activate the HPA axis thereby causing hypercortisolaemia. Of the numerous neurotransmitters believed to play a role in the aetiology of depression, cartoning plays a pivotal role. Stress not only stimulates the release of CRF but also enhances serotonin turnover. The mechanism whereby stress affects the immune, endocrine and serotonin network lies in the induction of the indoleamine 2,3 dioxygenase (IDO) pathway which metabolises the serotonin precursor tryptophan to kynurenic and quinolinic acids. This decreases the availability of tryptophan for serotonin synthesis in the brain. In addition, the accumulation of the neurotoxin quinolinic acid causes hippocampal and cortical cell death, an event to which cortisol also contributes. Thus chronic stress acts as a major cause of the accumulation of pro-inflammatory cytokines and glucocorticoids which cause a reduction in the functional activity of the serotonergic system and thereby contribute to the psychopathology of depression.

S08.02

The HPA axis in social anxiety disorder and schizophrenia

J.H. Thakore*. *Neuroscience Centre, St. Vincent's Hospital, Dublin, Ireland*

Evidence supporting either basal or stimulated hypothalamic-pituitary-adrenal (HPA) axis dysfunction in schizophrenia is inconsistent. We measured plasma levels of arginine vasopressin (AVP), corticotropin (ACTH) and cortisol from 1300 h to 1600 h in order to determine whether first episode, drug naïve patients with schizophrenia have evidence of basal HPA axis dysfunction. Metoclopramide, a dopamine type 2, receptor antagonist is also a potent stimulus for AVP secretion; therefore, we determined the effects of metoclopramide-induced AVP release on pituitary-adrenal function in a similar population. In the first study (n = 12) we found that patients with schizophrenia as compared to healthy controls had higher AUC of ACTH (26.3 ± 6.2 nmol/L vs. 13.9 ± 3.0 nmol/L,

respectively; $p < 0.02$) and cortisol (279.4 ± 26.0 nmol/L vs. 213.1 ± 18.4 nmol/L, respectively; $p < 0.01$) though lower AUC of AVP (0.87 ± 0.24 pmol/L vs. 1.42 ± 0.34 pmol/L, respectively; $p < 0.02$). In the second study ($n = 10$) we found that metoclopramide-induced cortisol (270.91 ± 27.0 nmol/L vs. 32.1 ± 22.1 nmol/L, respectively; $p < 0.0001$) and ACTH (5.12 ± 0.5 pg/ml vs. 1.6 ± 0.4 pg/ml, respectively; $p < 0.0001$) responses were greater in patients, as compared to controls yet there were no differences in terms of AVP responses between the 2 groups (0.37 ± 0.06 pmol/L vs. 0.31 ± 0.04 pmol/L, respectively; $p < 0.44$). First-episode, drug naive patients with schizophrenia show evidence of basal overactivity of the pituitary-adrenal axis and have greater AVP-induced pituitary-adrenal responses.

S08.03

Quality of life measures in schizophrenia

J. Bobes*. *Department of Psychiatry, Faculty of Medicine, Oviedo, Spain*

Different 'hot' aspects concerning quality of life measurement in schizophrenic patients will be addressed. First of all, the advantages and disadvantages of the different approaches to the measurement of quality of life in these patients will be reviewed - mainly subjective versus objective, and generic versus specific strategies-. Secondly, a comparative analysis among the different quality of life instruments more widely employed in schizophrenic patients will be made, emphasizing their strengths and weaknesses. Also, I would like to highlight the relatively low utility that such measures have nowadays in terms of translation into practical and meaningful indicators for everyday clinical practice. Different long term studies using quality of life outcome measures with different antipsychotics will be reviewed. Finally, a synthesis of our experience using disability and quality of life as long term outcome measures will be made.

Conclusion: there is a need to develop standards for quality of life measurement and methods for translating the results of such measurements into meaningful clinical, functional, social and economic indicators.

S08.04

Workplace stress, quality of life and coping

P. Bech*. *Psychiatric Research Unit, Frederiksborg General Hospital, Hillerød, Denmark*

A survey on the impact of stressors on mental and physical health and on coping has been carried out in Danish managers. Former managers currently employed in non-manager jobs ($N=1265$) were compared to managers currently employed in manager jobs ($N=932$) and with managers currently unemployed ($N=177$). In all three groups, around 75% were males and the mean age was around 40 years. The measure of distress was performed by the WHO-5 Well-being Index, the Symptom Checklist (SCL) and the Major Depression Inventory (MDI). In the control group 5% had a major depression, while 14% in the non-control groups had a major depression. Among the workplace stressors with the highest impact on depression were lack of influence, lack of social support, and workload. However, a logistic regression analysis identified alcohol to be a most important factor for developing depression as well. Within the depressed group, 33% had contacted their family doctor and one third of these had received antidepressants. The WHO-5

Well-being Index was found to be a good screening instrument for distress and depression.

W04. Workshop: L'information du Patient en Psychiatrie

Chairpersons: Louis Roue (Nice, France),
Martine Fouchet (Nice, France)
10:30 – 12:00, Hall E

W04

L'information du Patient en Psychiatrie

P. Dunezat¹, G. Decroix², E. Gokalsing¹, P. Giordano¹, J. Palazzolo¹. ¹CH Sainte Marie, Nice. ²Le Sou Medical, Paris

L'obligation d'informer le patient qui incombe au médecin et qui est repris dans la législation sur les droits des malades est certainement l'un des domaines sur lesquels les praticiens européens se sont le plus interrogés ces cinq dernières années. En effet, le médecin doit prouver qu'il a rempli son obligation d'information, permettant ainsi au patient de donner un consentement éclairé; par ailleurs, le devoir d'information concerne tous les risques graves (exceptionnels ou non) encourus par le malade.

Or, en raison des nuances d'interprétation des juristes et des assureurs, et dans la mesure où le défaut d'information est actuellement souvent à l'origine d'une demande d'indemnisation, les médecins s'interrogent sur la meilleure conduite à tenir. Comment prouver la qualité de l'information donnée ? Un écrit, voire un écrit signé, est-il la seule preuve possible ? Et si oui, quel doit en être le contenu ?

Au cours de ce symposium, nous allons tenter de donner une vue synthétique de l'état du droit européen, et d'élaborer conjointement une liste de conséquences pratiques, en tenant compte du point de vue du psychiatre, du juriste, du patient et de ses proches.

W15. Workshop: Access to Care for Mental Illness in Central and Eastern Europe

Chairpersons: Nadja Maric (Belgrade, Serbia & Montenegro), Richard Gater (Manchester, UK)
10:30 – 12:00, Hall F

W15

Access to care for mental illness in Central and Eastern Europe

V. Alikaj⁶, T. Cavic⁵, R. Gater¹, N. Maric², A. Mihai³, N. Sartorius⁷, V. Tunstall⁴. ¹Department of Psychiatry, University of Manchester, Withington Hospital, UK. ²UKC, Belgrade, Serbia and Montenegro. ³Department of Psychiatry, University of Medicine, Tg. Mures, Romania. ⁴Institute of Psychiatry, London, UK. ⁵Psychiatric Hospital, Belgrade, Serbia and Montenegro. ⁶Arkitekt Kasemi, Tirana, Albania. ⁷University of Geneva, Switzerland

An understanding of the way people seek care for mental disorders is increasingly recognised as important for planning of psychiatric

services, and provision of appropriate training and referral mechanisms in other sectors of health and social care. The E-EPSI group (Eastern European Psychiatric Scientific Initiative) is a recently formed group of psychiatrists who are aiming to make evidence-based developments of psychiatric services in Central and Eastern Europe. E-EPSI has decided that the first step towards reform is to acquire reliable data about pathways to care. A collaborative study of the pathways that lead patients to psychiatric services has been carried out in eight centres: Beograd, Bucharest, Iasi, Sofia, Strumica, Tirana, Tg Mures, and Zagreb. The studies use the same methodology as that employed in the WHO study of pathways to care. The results show differences between centres in the diagnostic composition of new patients and the extent to which the main pathways through general practice, hospital doctors and direct access are used. The study has also demonstrated different patterns of diagnosis, presenting problems, delays, and previous treatment. Detailed presentations of the main findings from the eight centres will be made in the workshop, and these will be used as the basis for discussion on how these findings can be used to inform service developments appropriate to the needs of the populations served, and to formulate the recommendation for post-graduate training in psychiatry and further research.

Free Communications: Child Psychiatry I

10:30 – 12:00, Hall G

Adolescents with learning disabilities and their mental health needs

A. Hassiotis*. *Department of Psychiatry, Royal Free Hospital and University College, London, UK*

Background: Adolescents with intellectual disability (ID) and mental health problems are a distinct group with particular difficulties, which need to be addressed.

Aim: To investigate the prevalence of mental health problems in adolescents with intellectual disability in a geographically defined catchment area and explore the pathways of care available to adolescents and their parents.

Method: A cross sectional survey of adolescents aged 12-19 years old.

Results: 75 adolescents were seen in total. The majority had mild learning disability. 18% had a history of epilepsy/seizures and 16% had autism. 50.7% (38/75) had a mental health problem as reported by parents, but that increased to 66.7% (50/75) following assessment by the researcher. The commonest ICD 10 diagnoses were conduct disorder, atypical autism and hyperkinetic disorder. Caseness was associated with increased levels of disruption in the adolescent and with male gender. Positive psychiatric history, low scores in the Vineland socialisation subdomain and level of intellectual disability were predictors of psychopathology. Chronological age appeared to be inversely associated with the adolescents' adaptive functioning. In terms of service utilisation, the majority of the participants (53 adolescents out of 75 or 70.7%) had contact with health professionals, 52% of who were known to both Social Services and Health. 22.7% of the adolescents seen were receiving antipsychotic medication.

Conclusion: Prevalence rates for mental health problems in adolescents with a learning disability are high. Adolescents with a

history of disruption, especially males with mild intellectual disability, could benefit from early intensive support.

Treating adolescents with learning disorders in the community

H. Lazaratou*, D.C. Anagnostopoulos, E. Tsalamaniotis, A. Sini, E. Rogakou, B. Kontaxakis. *Psychiatric Department, Community Mental Health Centre, University of Athens, Greece*

The aim of the present study is the registration of the school learning disorders of adolescents who attended the Community Mental Health Center of Byron and Kesariani during the time period 1996-2000, and the assessment of the suggested recovery means. From the total of 290 adolescents, age range: 12-18 years that were examined in our facilities during the above time period 53 presented school learning disorders. Sex, age, and school attendance, mode of reference, quest, diagnoses, managing means and compliance to the suggested treatment were registered. Learning disorders is the most frequent diagnosis given to the adolescents who attend our centre, 53/290 (18,6%). Statistical trials have brought up the following results: Boys in the adolescence present more learning problems than girls. They are more often junior high-school students than high-school students, and their mean age is smaller than that of the adolescent's general sample. The referral to the centre is usually made by the school. The diagnosis is related to the quest. No significant difference was found between the managing means and the compliance to the suggested treatment. It is known that the recovery potential of learning disorders after the entry in adolescence is limited and their management proved to be inadequate. It has been shown that the main managing method has been limited to the diagnostic assessment and the certificate granting that will be used as a means of receiving lenient grading in school. The psychotherapeutic and psycho-pedagogic treatment constituted the selective approach means of isolated cases.

Comparison analysis of quality of life level and clinical picture for the persons with the mild degree of mental deficiency at various forms of training

N.A. Tumanov*, B.D. Tsygankov. *Chair of Psychiatry and Addictology, Moscow State University of Medicine and Dentistry, Moscow, Russia*

Purpose of the study: To determine the clinical characteristics of mild degree mental deficiency dynamics and quality of life of patients, who have that pathology depending on conditions of educational programs.

Material and methods: The study is based on the questionnaire survey of persons with mild degree of mental deficiency using questionnaires to determine the quality of life and social functioning, the level of neuropathy and psychopathy, as well as Weckslers test to determine intelligence level.

Results of the study: On the basis of data obtained the programs for adaptation and rehabilitation of patients were offered. The program of rehabilitation that included the use of neuroleptics, stimulating and general improving health therapy, has improved significantly the quality of life factors due to reduction in psychopathological disorders. With the usage of propazone the positive results have been found in the course of treatment of 90% patients and with perphenazine in 84,62% cases. In parallel with it, the minimum expression of side effects was found, which didn't require lengthy use of correction medicine.

Conclusions: The obtained results have shown that the most optimal way of training both for forecasting of the positive evolution dynamics of mental deficiency as well as for high estimates of quality of life level of graduates, is the system which combines successive step-by-step training first in the correction school, then in the vocational school with a special class for mentally retarded pupils and finally the training at the basic enterprise for the vocational school.

Mental retardation in children aged 1-18, incidence and prevalence, in the Republic of Macedonia

M.A. Kaeva-Pejkovska*. *Institute of Mental Health, Skopje, Macedonia*

A survey of the epidemiological aspects of mental retardation in children aged 1-18 was carried out in the Republic of Macedonia. Supplementary research was done. Calculations of incidence and prevalence rate of mental retardation, analysis of the etiological aspects of mental retardation. The study is based on the collection of 3.671 juveniles in 1998, on 3.753 in 1999 and on 3.775 in the year 2000. Also the categorization of the juvenile persons was realized and assigned in groups by severity of mental retardation, sex and place of living.

Results: The average rate of prevalence of the mental retardation per year in the Republic of Macedonia is 2,75% in the population until 18 years and 1,67% in the total population of the country for the same period. The prevalence rate for the categorized persons is 1,851% per year. The rate of incidence of mental retardation for the same period in the total population of the country is 0,219%, in the population until 18 years is 0,16%, and for three years period the average rate of 0,48%. The categorization of the persons was analyzed, and also the genetic aspects of mental retardation. Detailed analyses in the local community by sex, age and place of living were carried out, for each of the four types (mild, moderate, severe, profound) of mental retardation. The etiological factors of mental retardation were examined and arranged in accordance with the period of genesis (prenatal, perinatal, postnatal and uncertain) and by the type of mental retardation.

Antenatal exposure of persons from Belarus following the Chernobyl accident: Ten years follow-up investigation

S.A. Igumnov*. *Belarusian State Pedagogical University, Department of Psychology, Minsk, Belarus*

Ten years follow-up investigation of intellectual development of 250 persons from Belarus exposed in utero following the Chernobyl accident has been conducted. Exposed group of persons was compared with a control group of 250 persons in the same age from non-contaminated regions. Neuropsychiatry and psychological examinations were performed among persons of both groups at the age 6-7 years, 10-12 years, and 15-16 years. The intellectual development of the persons was examined by means of psychological testing using the Wechsler Intelligence Scale for Children - WISC-III-UK (Wechsler, 1992). At the age of 6-7 years the persons in the exposed group had a mean Full Scale IQ lower than the control group (89.6+/-10.2 vs 92.1+/-10.5, P=0.007). At the age of 10-12 years there were no statistically significant differences between the two groups (94.3+/-10.4 vs 95.8+/-10.9, P=0.117). Positive dynamics of intellectual development in persons of exposed group has

been observed up to age of 15-16 years (IQ: 98.7+/-10.2). No statistically significant correlation was found in exposed group between individual thyroid dose as well as individual antenatal external dose and IQ at the age of 6-7 years, 10-12 years, and 15-16 years.

Behaviour disorders in urban primary school children in Dhaka, Bangladesh

M.G. Rabbani^{1,*}, M.M. Hossain². ¹*Department of Child, Adolescent and Family Psychiatry, National Institute of Mental Health and Hospital, Dhaka, Bangladesh.* ²*Department of Community Medicine, Faculty of Medicine and Health Sciences, United Arab Emirates University, Al Ain, United Arab Emirates*

Data on the prevalence and correlates of behaviour disorders in children are scanty in many countries, including Bangladesh. A sample of primary school children in Dhaka city, Bangladesh, was screened during February to April 1994 with the Rutter B2 Scale to estimate the prevalences of different types of behaviour disorders and to assess whether and how these prevalences were associated with the children's age and gender, and gender segregation at school. Of the 1288 children in grades 1 to 5 screened, 13.4% had some type of behaviour disorder, with males more than twice as commonly affected as females (20.4 vs 9.9%). Emotional, Conduct, and undifferentiated disorders were detected in 3.2, 8.9 and 1.2%, respectively, of the children. All three disorders were more prevalent in males than in females. In multivariate logistic regression analyses, significant positive correlates were male gender (odds ratio (OR): 3.1) and higher grades (reference: grades 1-2; OR for grade 3:9.1; OR for grade 5:4.2) for conduct disorder, and male gender (OR: for grade 3:6.2) for all disorders combined. None of the three independent variables examined was significantly associated with emotional disorder. Separate analyses could not be done for undifferentiated disorder because of the small numbers involved. The high prevalence of behaviour disorders in Dhaka city primary school children suggest that a mental health care programme for these children comprising screening and, it indicated, full evaluation and expert care would be worthwhile.

Keywords: Bangladesh; behaviour disorder; primary school children; Rutter B2 Scale

S20. Symposium: Suicidality: A Target for Drug Treatment?

Chairpersons: Hans-Jürgen Möller (Munich, Germany), Siegfried Kasper (Vienna, Austria)
10:30 – 12:00, Hall H

S20.01

Antidepressants reduce suicidality in acute depression

H.-J. Möller^{1,*}, S. Kasper², W. Greil³, U. Hegerl¹. ¹*Psychiatric Department, University of Munich, Germany.* ²*Psychiatric Department, University of Vienna, Austria.* ³*Psychiatric Department, Sanatorium Kilchberg, Switzerland*

Besides counselling and other psychotherapeutic approaches psychopharmacological treatment is necessary for many suicidal pa-

tients, especially depressive patients. In consequence antidepressants have an important place in this field. There is a large body of evidence demonstrating that antidepressants are able to reduce suicidality of acutely depressive patients. Besides the hypotheses that serotonergic antidepressants might have a specific impact on suicidality, there are other considerations, when selecting an antidepressant for suicidal depressive patients. Compounds with a sedative profile (e.g. amitriptyline, doxepine, mianserine, remeron) are often favoured; drugs that increase drive, such as MAO inhibitors or desipramine, may increase the risk of suicide. Another aspect of drug selection is that the antidepressant should be safe in overdose, which is proven for drugs such as the SSRIs, mianserine and remeron. It should be remembered that SSRIs have no sedative potential and in some cases even cause agitation; it may be necessary to coprescribe a benzodiazepine or a sedative neuroleptic. Preferential administration of SSRIs in the treatment of suicidality is based on hypotheses regarding the role of serotonin. However, a clear empirical validation of this approach is lacking.

S20.02

Lithium compared to other mood stabiliser in its suicide preventive effect

W. Greil^{1,2,*}, N. Kleindienst². ¹*Psychiatric Clinic, Sanatorium Kilchberg, Switzerland.* ²*Psychiatric Department, University of Munich, Germany*

Bipolar disorders represent a high-risk group for suicidal behaviour with an estimated lifetime-risk for completed suicide of about 8% to 20%. Besides prevention of mania and depression prevention of suicide should hence be considered as a major target of any treatment strategy (1). Several open studies reported lithium to reduce the incidence of suicidal events by a factor of 8 or greater. Regarding suicide preventing effects other mood stabilisers there is only a small body of evidence. With respect to suicide prevention, newer mood stabilisers such as lamotrigine or olanzapine have not been studied with sufficient statistical power yet. Studies comparing the suicide preventing effect of lithium with valproate or carbamazepine are in favour of lithium. Results of a recent study (2) comparing suicides and suicide attempts of the three substances in more than 20,000 bipolar patients were clearly in favour of lithium showing about half as many suicidal events. This finding is in line with the results of the MAP study on bipolar or schizoaffective patients randomised to either prophylactic lithium or carbamazepine (n=117 in either group). Although both study-medications were generally equally efficacious, all suicidal events observed during the study period (5 attempted suicides and 1 completed suicide) occurred under carbamazepine (1). This result is corroborated by additional observations from the open period with 3 vs. 0 completed suicides under carbamazepine (3).

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S20.03

Safety issues of antidepressants with respect to suicidality

S. Kasper*, R. Frey. *Department of General Psychiatry, University of Vienna, Austria*

Intoxication is one of the most frequently used methods, specifically in females, to commit suicide. While the older antidepressants, the tri- and tetracyclics, are highly toxic, it emerged soon after the introduction of the group of selective serotonin reuptake inhibitors (SSRIs) that their toxicity, which can be expressed by means of the fatal toxicity index (F-Index) is far lower than that of the older generation of antidepressants. At the Department of General Psychiatry of the University of Vienna, we established an intoxication register together with the Institute of Forensic Medicine and first described for the years 1991–1997 autopsy-verified intoxications by means of antidepressants. For this time-span, 164 fatal intoxications were identified. For both single- and multiple-substance intoxications, it emerged that SSRIs had a highly significant ($p < 0.001$) lower fatal toxicity index compared to tricyclic antidepressants. Single-substance intoxications were exclusively found in tricyclic antidepressants and there was no case in the group of SSRIs. Our data are in line with other intoxication databases, which is one of the reasons why antidepressants with such a toxicity profile would not be approved by health authorities nowadays.

S20.04

The 'Nürnberg' Alliance against Depression: A replication of the Gotland study

U. Hegerl^{1,*}, D. Althaus¹, G. Niklewski², A. Schmidtke³. ¹*Department of Psychiatry, Ludwig-Maximilians-Universität, Munich.* ²*Psychiatric Hospital, Nuremberg.* ³*Department of Psychiatry, University of Würzburg, Germany*

In the 'Gotland-study' training of GPs concerning depression and suicidality was associated with a reduction of suicides and an increase of the prescription of antidepressants. Motivated by these results a 2-year and four-level intervention study for improving the care of depressed patients and for preventing suicidality was conducted in Nuremberg. The intervention levels were 1) close cooperations with GPs, 2) a professional PR-campaign, 3) information and support for 'multipliers' such as teachers, priests, media and geriatric care givers, and 4) support of self-help activities. Evaluation took place both with respect to 1-year baseline and a control region (Würzburg). Concerning the main outcome parameter 'suicidal acts' (combination of suicide attempts and suicides), a highly significant reduction was observed in Nuremberg as compared to Würzburg. In secondary analyses, this effect could also be statistically proven for suicide attempts but not for suicides. Further evaluation was performed concerning changes in public attitudes, changes in media coverage or drug prescriptions. This Nuremberg Alliance against Depression project provides evaluated materials and concepts for establishing community based action programmes against depression and suicidality. The intervention programme is presently extended to several other regions in Germany and Europe.

S47. Symposium: Involuntary Treatment of Mentally Ill in Europe

Chairpersons: Thomas W. Kallert (Dresden, Germany), Lars Kjellin (Örebro, Sweden)
10:30 – 12:00, Hall I

S47.01

Involuntary admission rates in Europe and the context of re-institutionalisation

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

The paper presents data from several European countries on how involuntary hospital admission rates have changed since 1990. These rates will be put into the context of re-institutionalisation in mental health care. This process of re-institutionalisation is characterised by a rising number of forensic beds, more involuntary hospital admissions, and an increasing number of places in residential care and supported housing. Also, there are initiatives to widen legislation for compulsory treatment as well as ideas for assertive outreach and early intervention which might be seen as signs of re-institutionalisation. Data on re-institutionalisation will be presented, and it will be discussed whether and, if so, to what extent the concept of re-institutionalisation may help to understand policies for involuntary hospital admissions. Whilst, re-institutionalisation appears to occur across most middle and western European countries, there are also important differences in the traditions and practice of involuntary hospital admission. Such differences will be briefly discussed taking Germany and the UK as specific examples.

S47.02

Aspects of coercion in psychiatry - some results from a Nordic study

L. Kjellin*, M. Engberg, G. Høyser, R. Kaltiala-Heino, M. Sigurjónsdóttir. *Psychiatric Research Centre, Örebro, Sweden*

The aim of this paper (which is part of a Nordic study on the use of coercion in the mental health care system) is to describe differences between the Nordic countries in the use of involuntary legal commitment and patient perceived coercion. One centre in Denmark, three in Finland, one in Iceland, four in Norway and four in Sweden participated in the study. Data from medical records were collected in a uniform way in all centres, and patient interviews were performed within five days of admission, using the Nordic Admission Interview. 5700 case records were included (Denmark 472, Finland 1545, Iceland 811, Norway 2212 and Sweden 660), and 932 patients were interviewed (Denmark 95, Finland 229, Iceland 123, Norway 258 and Sweden 227). Of the legally voluntarily admitted patients, the proportion of patients with at least one period, however short, of involuntary stay or detainment during the subsequent index care episode varied from 3% in Iceland to 21% in Denmark. Of the legally involuntarily admitted patients, the proportion of patients who reported they came to the hospital voluntarily varied from 0 in Iceland to 47% in Norway. In both aspects, there were variation also between centres within Finland, Norway and Sweden, respectively. Different legal regulations concerning civil commitment may be reflected in how involuntary care is recorded in the records, as well as in patients' perceptions of coercion, in the different countries.

S47.03

Ethical problems in decisions on coercive treatment

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Objective: Ethical attitudes towards coercive treatment should be compared among psychiatrists, other professionals, and lay-people

in 4 European countries using scenarios of schizophrenic patients refusing treatment.

Method: Three scenarios focusing on first episode, moderate danger to others, and severe self-neglect respectively, were presented to a total of n=1865 persons in Germany, Switzerland, UK, and Hungary. In each case, decisions were requested regarding formal admission and involuntary medication.

Results: Involuntary medication was proposed by 65.8% in scenario 1, 79.8% in scenario 2, and 58.9% in scenario 3. Admission and treatment against the patient's will in all three scenarios were significantly less likely to be supported by social workers, younger people, men, and by people with a history of psychiatric illness. There were no significant differences between psychiatrists, other professionals (except social workers) and lay-people. Agreement with formal admission and involuntary treatment was highest in Hungary, followed by UK and Germany, and lowest in Switzerland.

Conclusion: The agreement between the four countries concerning indications for involuntary treatment of schizophrenic patients was relatively high, even in the scenarios designed to be somewhat controversial. However, reasons for the differences between the countries should be investigated further.

S47.04

Burden on relatives of patients with schizophrenia who have received compulsory treatment

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

This study aims to: a) explore burden and support received from professionals and social network in relatives of patients with schizophrenia who have been compulsorily admitted to a psychiatric ward in the previous 12 months; b) test whether burden is higher among relatives of patients who have been compulsorily admitted than in those of patients who have been either never admitted or voluntarily admitted in the reference period. Data have been drawn from the Italian National Study on Schizophrenia, carried out in 30 mental health services randomly selected and stratified by geographic areas and population density of their catchment area. In the initial sample of 709 cases, we found 55 patients compulsorily admitted in the previous 12 months. These patients were compared with 110 cases who had been voluntarily admitted and 420 who had never been admitted and who lived in the same geographic areas. Relatives' burden and professional and social network support were evaluated by the Family Problem (FPQ) and the Social Network (SNQ) questionnaires. Burden was found to be similar in relatives of patients who received a compulsory or a voluntary hospital treatment and significantly lower in relatives of those who had never been admitted in the reference period. Practical support provided to families by social network was significantly lower among relatives of admitted patients than in those of users who did not. These results suggest that in Italy compulsory treatment is not per se associated with high family burden.

S47.05

Typical practice of administering coercive measures: Results from 12 study centres of the EUNOMIA project

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

Background: Recent European research projects have shown significant variation concerning different elements of mental health

care. Particularly, this applies to aspects of coercive treatment measures. Therefore, clinical practice and outcome these treatment measures should be assessed in more detail.

Methods: This is the general research objective of the EC-funded EUNOMIA-project (01/12/2002 - 30/11/2005) focusing on the assessment of legally defined coercive measures (i.e. involuntary hospital admission, mechanical restraint, seclusion, forced medication) as well as of perceived coercion in 12 regions in 12 European countries. Aims and details of the naturalistic study design as well as its implementation are described briefly. In order to finalize the documentation of the individual incidents of administering coercive measures, the EUNOMIA-group developed a survey instrument for standardized interviews of clinical staff at the acute wards participating in the study. 496 interviews on the established typical practice were conducted in January-February 2003. Statistical methods of analysing the data comprise descriptive analyses, analyses of variance and cluster-analyses.

Results: In nearly all of the assessed clinical elements relevant for administering these coercive treatment measures the pilot study detected significant differences between centres and between measures. Particularly, this applies to the number of incidents on the wards within the last year, to documented reasons for the different types of coercive measures, and to the typical time-course of coercive measures.

Conclusion: These results emphasize the rationale of the EUNOMIA-project. Furthermore, continuous education of staff in the clinical use of coercive measures is necessary in order not to infringe patients' rights.

The aim of our study was to investigate the role of neuronal disconnection in the regional brain metabolism and disruption of information processing in schizophrenia. In order to determine the role of disconnection in brain metabolism and information processing in schizophrenia, we evaluated fronto-temporal and interhemispheric electroencephalographic (EEG) coherence and the resting metabolism by the 18F-deoxyglucose (18FDG) positron emission tomography (PET) in 37 subjects with schizophrenia. For statistical treatment of the neuroimaging data we used the standard voxel-to-voxel analysis (SPM99) with the EEG coherences as covariates. In the group of schizophrenic patients we found a significant negative correlation between EEG coherence and 18FDG uptake in the temporal cortex (BA 24, 28, 38, hippocampus), rectal and medial frontal gyrus (BA 11 and 25) and positive correlations between EEG coherences and 18FDG uptake in neocortical regions (BA 19, 4, 6, 8, BA 7, 46). These results provide evidence for a relationship between reduced connectivity assessed by means of EEG coherence and 18FDG uptake changes primarily in the limbic system and mediofrontal cortex. The data support the role of connectivity in regional brain metabolism and information deficit in schizophrenia. This project was supported by the research project CNS LN00B122 MSMT CR and IGA NF NF/7578 - 3 MZ CR.

Meet the Expert Session

Interviewers: Adriana Mihai (Tg. Mures, Romania),
Kai Treichel (Berlin, Germany),
Ian Brockington (Birmingham, UK),
Robin M. Murray (London, UK)
12:15 – 14:00, Hall H

S56. Symposium: Brain Structural and Functional Correlates of Information Processing in Schizophrenia

Chairpersons: Cyril Höschl (Prague, Czech Republic),
Nancy C. Andreasen (Iowa City, IA, USA)
14:15 – 15:45, Hall A

S56.01

Brain metabolism and information processing in schizophrenia

J. Horáček^{1,2,3*}, M. Brunovsky^{1,2}, M. Kopeček^{1,2}, C. Dockery², F. Spaniel^{1,2,3}, C. Höschl^{1,2,3}. ¹Department of Neuroimaging, Prague Psychiatric Center. ²Center of Neuropsychiatric Studies. ³3rd Medical Faculty of Charles University, Prague, Czech Republic

S56.02

The role of serotonin in an information processing: Animal model of schizophrenia

V. Bubeníková*, T. Páleníček, J. Horáček. Prague Psychiatric Center, Czech Republic

How important is the serotonergic system in the modulation of information processing in animal model of schizophrenia-like behavior? In order to answer this question we used three different treatments to influence the serotonergic system in rats, which include the agonist of 5-HT_{1A} R (8-OH-DPAT), the antagonist of 5-HT_{1A} R (WAY 100635) and the antagonist of 5-HT_{2A/2c} R (ritanserin). We chose acute administration of MK-801 to induce schizophrenia-like behavior (hyper-locomotion and a deficit in pre-pulse inhibition of the startle response; PPI). Firstly, we observed changes in behavioral activities (locomotor activity in an open field and changes in the PPI) followed by application of the drugs separately, in different doses. We found a dose-dependent increase of locomotor activity after 8-OH-DPAT pre-treatment and a slight decrease in the PPI of the startle response. Secondly, we noticed changes in behavioral activities after administration of the treatments in MK-801 induced animal model of schizophrenia-like behavior. Pre-treatment with ritanserin and WAY 100635 decreased the MK-801 induced behavior. On the other hand, 8-OH-DPAT amplified the MK-801 induced behavior. Finally, to affirm the important role of the serotonergic system in information processing in the model of schizophrenia, we compared the effect of three pharmacologically different antipsychotics on behavior; zotepine, clozapine and olanzapine. We found different effects of the drugs on the MK-801 induced behavior, which can be explained by their different affinities to 5-HT_{1A} and 5-HT_{2A/2C} R. This research was supported by grant No. NL 7684-3 from the Grant Agency of the MHCR.

S56.03

Theory of mind: The interface of emotion and language in schizophrenia

N.C. Andreasen*. *The University of Iowa, School of Medicine, Iowa City, IA, USA*

The concept of “theory of mind” (TOM) refers to the ability to infer and attribute mental states to one’s self and to others and to recognize that behaviors are guided by these mental states. This capacity, which is related to the capacity to have empathy, is an important component of social interactions. It appears to be impaired in many individuals with schizophrenia. We undertook a study of TOM in a group of healthy volunteers and patients with schizophrenia, using PET to identify the neural circuits used during a language task that required subjects to attribute a mental state to another person. In normal individuals this task activated a distributed group of nodes that included anterior cingulate and paracingulate regions, L anterior frontal regions, L anterior temporal lobe, and R cerebellum. Many of these regions are implicated in the identification of goals and associative memories. The patients with schizophrenia had decreased flow in multiple regions (lateral cerebellum and vermis, visual association cortex, and the thalamus) and increases in others (R inferior frontal, R dorsolateral frontal, R parietal, and R putamen). The areas of decreased flow are consistent with many previous studies indicating problems in recruiting cortical-cerebellar circuits in schizophrenia. The areas of increase may reflect a need to draw on right hemisphere regions to perform the task, in order to compensate for deficits in left frontal and cingulate regions.

S56.04

Reduced cerebellar vermis volume in patients with chronic schizophrenia

G. Okugawa^{1,2,*}, G.C. Sedvall¹, I. Agartz¹. ¹*Department of Clinical Neuroscience, Human Brain Informatics Center (HUBIN), Karolinska Institute and Hospital, Stockholm, Sweden.* ²*Department of Neuropsychiatry, Kansai Medical University, Osaka, Japan*

Objective: The cerebellar vermis plays an important role in cognitive function. A number of cognitive dysfunctions has been reported in schizophrenia. Since the cerebellar vermis is associated with cognitive dysfunction, we hypothesized that the volume of cerebellar vermis may be reduced in patients with schizophrenia. The purpose of this study was to compare the volume of cerebellar subregions between patients with schizophrenia and healthy subjects using magnetic resonance imaging (MRI).

Methods: Brain volumetric analyses were performed with MRI in fifty-nine patients with chronic schizophrenia, fulfilling DSM-IV criteria and fifty-seven healthy subjects. All subjects were recruited at the Department of Clinical Neuroscience, Karolinska Hospital. MR data analyses (automated segmentation) were performed at the Psychiatry Section, Karolinska Hospital, using the software suite BRAINS. The cerebellar anterior vermis, posterior superior vermis, posterior inferior vermis, cerebellar tonsils and hemispheres were manually parcellated on the segmented images and measured.

Results: The patients with schizophrenia had significantly smaller volumes of total vermis and vermian subregions than the healthy subjects. There were no significant differences in measures of intracranial volume and cerebellar hemisphere volumes between schizophrenic and healthy subjects.

Conclusion: These findings support the view that within the cerebellum, there is a selective volume reduction of the cerebellar vermis in patients with chronic schizophrenia.

S17. Symposium: Second Generation Antipsychotics: Outcome Criteria Beyond Efficacy

Chairpersons: Norman Sartorius (Geneva, Switzerland), Wolfgang W. Fleischhacker (Innsbruck, Austria)

14:15 – 15:45, Hall B

S17.01

Efficacy, efficaciousness, efficiency - different approaches to evaluate outcome in schizophrenia

M. Knapp*. *Centre for the Economics of Mental Health, London, UK*

The most important question to ask of any treatment or intervention is ‘Does it work?’ But following shortly behind is the question ‘Is it worth it?’ That is, does the effective or efficacious treatment generate outcomes that are worth the cost of achieving them? This ‘efficiency’ question (sometimes called the ‘cost-effectiveness’ question) is being posed with increasing frequency as health system decision makers face up to the challenge of trying to squeeze more and better services, health and quality of life outcomes out of fixed or perhaps even declining resources. This presentation will reflect on the interpretation and measurement of efficiency in mental health contexts, with particular reference to the atypical antipsychotics. What does the European and other evidence tell us about the cost-effectiveness of their use in treatment of people with schizophrenia?

S17.02

The WPA consensus on the use and usefulness of the second generation antipsychotic medications

N. Sartorius*. *Hôpital Cantonal, Geneva, Switzerland*

In 1996 the General Assembly of the World Psychiatric Association (WPA) added the development of ‘consensus statements on important issues for psychiatry’ to the mandate of the Association. With its new mandate WPA had to venture to new territory, find an operational structure that would allow it to review scientific evidence and produce proposals for political consensus on the basis of a comprehensive review of existing evidence about scientific matters. The first consensus statements that WPA produced dealt with deontology and the next with standards of care for the elderly people with mental illness and the training of staff to provide such care. In 1998 WPA began work on the review of the scientific evidence concerning the use and usefulness of second-generation antipsychotic medications. The review was to serve as the basis for a consensus statement by the General Assembly of the WPA on the issue. The review was carried out by a task force working in consultation with professional psychiatric societies, nongovernmental organizations of families and patients, government representatives and numerous experts in some 40 countries. The review was published and the

General Assembly adopted a Consensus statement of the matter. The presentation will discuss the advantages and disadvantages of seeking consensus on issues related to treatment in psychiatry using the WPA consensus on anti-psychotic medications as an example.

S17.03

Comparing second generation antipsychotics to each other

W.W. Fleischhacker*. *Department of Biological Psychiatry, Innsbruck University Clinics, Austria*

The increasing use of second-generation antipsychotics for the treatment of schizophrenia has provoked much discussion over how to differentiate between the second-generation agents. The results of comparative studies focusing on general efficacy measures (such as the Positive and Negative Syndrome Scale and the Brief Psychiatric Rating Scale) and comparative studies focusing on cognition do not clearly favour one second-generation agent over another. However, some differences between second-generation agents are apparent from studies focusing on specific symptoms such as hostility, suicide and depression/anxiety. There are also differences between second-generation agents with regard to specific aspects of tolerability. For example, in a number of studies olanzapine is associated with less extrapyramidal symptoms than risperidone, but risperidone is associated with less bodyweight gain and somnolence, as is amisulpride. Ziprasidone and aripiprazole appear to carry the least risk to induce alterations of glucose and lipid metabolism. The correlation of increases in plasma prolactin, as induced by amisulpride and risperidone, with sexual dysfunctions is still discussed controversially. As there is currently not enough scientific evidence to clearly favour one second-generation antipsychotic over another in terms of efficacy or general tolerability, clinicians must make an individualised treatment decision to select the most appropriate treatment for each patient.

S17.04

The pragmatic clinical trial - an attempt to overcome shortcomings of phase II/III clinical trials

R.S. Kahn*. *Division of Neuroscience, University Medical Center Utrecht, The Netherlands*

Second generation antipsychotics have been shown to be at least as effective as the first generation antipsychotics in treating and preventing recurrence of psychosis in schizophrenia without the concomitant emergence of the typical side effects. However, studies examining drug effects are usually conducted in highly selected samples, excluding patients with dual diagnoses. Thus, the generalizability of the studies assessing the efficacy of the newer antipsychotics is limited at best. Indeed, it has been argued that the beneficial effects of the new antipsychotics would fail to materialize when compared with low dose use of typical antipsychotics in schizophrenic patients. Several studies are currently underway to compare the effects of second generation antipsychotics to typical antipsychotics in schizophrenia. These studies have in common outcome measures are general and reflect issues that are important in real-life such as retention in study, instead of improvement on a certain rating scale. In the USA a study in chronic patients is being conducted (CATIE) while in Europe a similar study is conducted in first-episode patients (EUFEST), most of whom will have been treated less than two weeks. These studies are the first of their kind in including a non-selected sample of patients, using general out-

come measures and following the patients for a much longer period (i.e. one year) than in the registration studies. Hopefully, they will address the outstanding issues in the effectiveness of the second generation antipsychotics.

S63. Symposium: Mixed Bipolar Affective Disorders

Chairpersons: Andreas Marneros (Halle, Germany), Eduard Vieta (Barcelona, Spain)

14:15 – 15:45, Hall C

S63.01

Phenomenology of Mania: Its relation to mixed mania

T. Sato*. *Department of Psychiatry and Psychotherapy, Ludwig-Maximilians University, Munich, Germany*

The clinical description of mixed mania dates back to early classic authors such as Kraepelin and Weygandt. Recent studies, using various multivariate statistic analyses, have confirmed part of their clinical observations and contributed much toward our understanding of complex phenomenological manifestations in manic patients. The findings of these recent studies include: 1) depressive mood is a salient syndrome in manic patients; 2) depressive inhibition is also a prominent syndrome, independent of depressive mood; 3) atypical manic features such as aggression, psychosis, and depression are unlikely to coexist in a manic patient; 4) there are several manic subtypes, characterized by differential symptom profiles, differential clinical features, and differential treatment responses. I will make a precise critical overview of recent advances in complex clinical presentations of manic patients. Some important issues, which future studies should elucidate, will also be described.

S63.02

Mixed states: Course and prognosis

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

Mixed bipolar states are not unusual. Their frequency is dependent on the definition applied (20–60%). But there is no evidence that mixed states is a longitudinally stable entity within the group of bipolar disorders. The findings of the 'Halle Bipolarity Longitudinal Study' (HABILOS) show that their frequency is dependent on the chronicity of the illness: the longer the duration of the illness the greater the possibility of developing mixed states. The frequency of mixed states during course is almost equal in affective as well as in schizoaffective disorders. But during course of bipolar disorders the majority of clinical episodes are depressive ones, followed by manic episodes. The proportion of mixed episodes to the other affective and schizoaffective episodes is really low. But, nevertheless, they have a strong prognostic validity for an unfavourable outcome. Patients with mixed states have more severe outcome, especially regarding social functioning and they have also more relevant social consequences than other bipolar patients. It seems that patients with mixed schizoaffective episodes have the more severe type of bipolar disorders.

S63.03

Treatment of mixed bipolar affective disorders

E. Vieta*. *Department of Psychiatry, University of Barcelona, Hospital Clinic, Spain*

The treatment of bipolar mixed states is complex and supported by a scant number of controlled studies. There is some indirect evidence that mixed states may be more responsive to anticonvulsants than to lithium. Valproate, and to a lesser extent carbamazepine, may be used either in monotherapy or as adjuncts to lithium. Use of other anticonvulsants, such as gabapentin, lamotrigine, leviteracetam, oxcarbazepine, tiagabine or topiramate, is not supported by controlled data as yet. Atypical antipsychotics, on the other hand, may be effective and safe either in monotherapy or in combination with lithium or valproate. Only the trials with olanzapine enrolled a substantial number of patients to allow for statistical subanalyses on this population. Aripiprazole, ziprasidone, and to a lesser extent risperidone and quetiapine have also been studied but the number of patients enrolled was quite small. Both evidence and clinical experience point at combination therapy of an atypical antipsychotic (mainly olanzapine) and an anticonvulsant (mainly valproate) or lithium as first-line therapy for mixed states. A good alternative is electroconvulsive therapy. More research is needed in this area.

S63.04

Long-term clinical aspects of mixed states

G. Perugi*. *Department of Psychiatry, Institute of Behavioural Sciences G. de Lisio, Pisa, Italy*

An average of at least 40% of all patients with bipolar disorder give evidence at one point or another of having a mixed state. In a joint research project between the Department of Psychiatry of the University of Pisa and the International Mood Disorder program of the University of California San Diego, we developed a 'user friendly' set of mixed state (MS) criteria based on the concepts of Kraepelin and the Vienna School. MS as defined by the DSM-IV criteria identifies only half of all MS. This subgroup conforms to the concept of dysphoric mania, which is the prototype of MS in the current literature. Our data also document the existence of at least two other forms of MS. The first is best characterized as mania with fatigue and indecisiveness. The second MS form is best described as agitated psychotic depressives with pressure of speech and flight of ideas. As regard affective temperaments, patients with mixed states, compared with those with pure mania, had a higher percentage of depressive and mixed temperamental traits. This finding support the possibility that mixed mania represents mania arising from a depressive temperamental baseline - i.e., a mixed state conceived as a reversal of temperament to its opposite polarity. Given that many MS consist of affective episodes and temperaments of opposite polarity, this might explain partly their greater affective instability and fluctuation.

S63.05

Comorbidity in mixed bipolar affective disorders and rapid-cycling forms

P. Brieger*. *Department of Psychiatry and Psychotherapy, Martin-Luther University Halle-Wittenberg, Halle, Germany*

Objective: Concepts of a bipolar spectrum have led to growing interest in mixed states and rapid-cycling forms of bipolar disorder. There is some debate as to whether, and to what extent, such special forms of bipolar affective disorders constitute separate entities. If differences concerning comorbidity in such forms of bipolar disorders were found, this would support the idea of separating them from 'typical' bipolar disorders. Overall, there are relatively few differences between (1) mixed states and (2) rapid-cycling forms in bipolar affective disorders, and 'typical' forms of bipolar disorders

concerning comorbidity. There is some indication of higher rates of anxiety (disorders) and anxious-dependent personality disorders in mixed affective episodes. Rapid-cycling courses of bipolar disorders may have a link with substance abuse and with certain neuropsychiatric disorders; or these neuropsychiatric disorders may mimic rapid cycling. Children and adolescents with bipolar affective disorders usually suffer from ultradian cycling and ADHD. Overall, comorbidity studies do not support the idea that mixed states and rapid-cycling forms are distinct categories of bipolar disorders, although they give an indication that it is relevant to diagnose mixed-states and rapid cycling for course and prognosis.

S46. Symposium: Psychological Interventions after Trauma

(Organised by the International Federation for Psychotherapy IFP)

Chairpersons: Ulrich Schnyder (Zurich, Switzerland), Roderick J. Ørner (Lincoln, UK)

14:15 – 15:45, Hall D

S46.01

Psychotherapies for PTSD - an overview

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

The efficacy of psychotherapeutic approaches in the treatment of PTSD can be regarded as empirically demonstrated. Overall, effect sizes seem to be higher for psychotherapy as compared to medication. Successful treatment of PTSD requires a well thought-out therapeutic attitude. The therapist must find a well-balanced position between over-identification and turning away out of helplessness. A sensation-seeking attitude should be avoided as should the danger of vicarious traumatisation. In many instances, PTSD cannot be treated sufficiently by psychotherapy alone: a comprehensive, multi-modal treatment plan may include pharmacotherapeutic, physical, social, legal, and other interventions. Many well-controlled trials with a mixed variety of trauma survivors have demonstrated that CBT is effective in treating PTSD. More specifically, exposure therapy is currently seen as the treatment modality with the strongest evidence for its efficacy. However, limitations of these approaches cause an ongoing search for improved treatments. Eye Movement Desensitization and Reprocessing (EMDR) is similarly effective in comparison to other exposure techniques, but eye movements in particular do not appear to have any incremental therapeutic effect. There is currently no sufficient evidence indicating that psychodynamic therapy is effective in reducing PTSD symptomatology. Brief Eclectic Psychotherapy (BEP) has recently been proposed as a fully manualized, multimodal treatment protocol that combines cognitive-behavioral and psychodynamic elements (e.g., domain of meaning and integration). A first RCT of BEP yielded promising results.

S46.02

Brief eclectic psychotherapy for PTSD: Treatment overview and empirical support

L. Wittmann*. *Psychiatric Department, University Hospital, Zurich, Switzerland*

Brief Eclectic Psychotherapy (BEP) has recently been proposed by Gersons and collaborators as a fully manualized, multimodal treatment approach protocol. It comprises five essential elements, namely (1) psychoeducation, (2) imaginery guidance (exposure), (3) writing assignments and mementos, (4) the domain of meaning and integration, and (5) a farewell ritual. The purpose of this presentation is to illustrate these components and to summarize the empirical data collected so far on the effectiveness of BEP in the treatment of patients suffering from PTSD. Further on, current research on BEP will be outlined.

S46.03

Variants of trauma exposure in PTSD treatment: Imaginative and narrative exposure

A. Maercker*, C. Knaevelsrud, T. Zöllner, J. Müller. *Clinical Psychology and Psychotherapy, University of Zurich, Switzerland*

Different evidence-based elements exist in psychotherapy of posttraumatic stress disorder. Based on this, we introduce a differentiation of trauma-exposure in this presentation. Imaginative re-experiencing including all sensory qualities is central in standard trauma-exposure. Approaches called narrative exposure techniques, however, are different in that they focus mainly on the telling of the trauma. First, we will present data on an ongoing study with imaginal exposure in treating road traffic accident victims. Furthermore, we will describe two narrative approaches, Life-Review and Testimony therapy, in greater detail and present data on these. Several controlled studies regarding both techniques show these techniques' value in the treatment of posttraumatic stress disorder. Nevertheless, further systematic research should investigate their use in psychotherapy.

S46.04

A pocket full of courage marbles: Creative interventions with traumatised children

K. Sadlier^{1,2,*}. ¹*Consultation Infantile Psychotraumatique, Paris.* ²*EPS Ville Evrard, Neuilly sur Marne, France*

This presentation will address the use of creative interventions in the psychotherapy of traumatised pre school and primary school aged children. Several factors have been identified in the scientific literature which contribute to children's psychological well-being after traumatic events. One of these factors is social support. How can the psychotherapist address this concept while working with relatively young children for whom therapy implies play methods? Proposals for creative interventions which seek to reinforce protective factors linked to social support will be presented and discussed.

S46.05

Early intervention for trauma survivors

R. J. Ørner*. *Department of Psychological Services, Lincoln University, UK*

Early intervention, usually in the form of psychological debriefing, has been advocated for trauma survivors on the basis of their proclaimed capacity to prevent PTSD. Systematic investigations have brought this claim into question with two Cochrane reviews indicating a typical neutral effect. But some of the studies show poorer prognosis for survivors who at the time of the intervention were still in a state of agitated hyperarousal. This presentation will

seek to extract key considerations in the ongoing controversy and make recommendations about future directions for this specialist field of psychotraumatology. Recent consensus is emerging that early psychosocial intervention after trauma should be delivered in a phased manner according to the dynamically evolving needs of survivors rather than in accordance with orthodox protocol prescriptions. The notion of psychological first aid is once again emerging as a useful construct for early intervention. Another key change in emphasis is away from the declared expertise of professional helpers to a model of flexible service delivery that gives centrality to consultation with survivors.

W09. Workshop: Troubles du comportement: du bébé à l'adolescent

Chairpersons: Francisco Palacio Espasa (Geneva, Switzerland), Dora Knauer (Geneva, Switzerland)
14:15 – 15:45, Hall E

W09

Trouble du comportement: du bébé à l'adolescent

A. Lasa³, M.L. Martelli⁴, F. Muratori², F. Palacio Espasa¹, S. Rusconi Serpa¹. ¹*Service de Psychiatrie de l'enfant et de l'adolescent, Département de Psychiatrie, Geneva, Switzerland.* ²*Cattedra di Pedagogia, Pisa, Italy.* ³*Faculté de Médecine, Département de Psychiatrie, Bilbao, Spain.* ⁴*Servizio Neuropsichiatria Infantile, Dipartimento Salute Mentale, Bologna, Italy*

Nous proposons un workshop, en français, sur différentes recherches menées par les présentateurs concernés sur le problème de la continuité, ou discontinuité, des troubles du comportement à travers les différents âges infanto-juvéniles. S. Rusconi et F. Palacio développeront les troubles du comportement du très jeune enfant à partir des psychothérapies parents-bébés. M.L. Martelli abordera le devenir à l'âge pré-scolaire des bébés traités par une psychothérapie parents-bébés. A. Lasa présentera le problème de la violence dans les troubles du comportement du jeune enfant et de l'enfant d'âge pré-scolaire, alors que F. Muratori développera les antécédents infantiles des troubles du comportement (conduct disorders) à l'adolescence. Il s'agit d'un problème d'une grande actualité, car la plupart des recherches s'accordent pour établir une assez forte continuité dans plus de 50% des troubles du comportement à travers les âges jusqu'à l'âge adulte.

S79. Symposium: The AEP Human Rights Symposium under the Auspices of the Secretary General of the Council of Europe, Mr. Walter Schwimmer

Chairperson: Paul Cosyns (Antwerp, Belgium)
14:15 – 15:45, Hall F

S79.02

Safeguarding disabled people against abuse

T. Afflerbach*. *Integration of People with Disabilities, Directorate General III - Social Cohesion, Council of Europe, Strasbourg, France*

This report describes the extent and nature of abuses committed against adults and children with disabilities in a range of situations and settings. It aims to ensure that people with disabilities are protected against deliberate and/or avoidable harm - at least to the same extent as other citizens - and that, when they are especially vulnerable, additional measures are put in place to assure their safety. The study covers all people with disabilities, regardless of the type of impairment, but stresses that persons with intellectual disabilities or mental health problems may require specific safeguards. It aims to improve their safety in their homes, at school, at work, in service settings, etc.

It contains:

- a workable definition of violence;
- case studies;
- an overview of recent research;
- a discussion of the legal framework and its contribution to protection;
- instruments to help professionals assess risk to people with disabilities, and to audit current practice and the level of protection;
- examples of good practice in policy and service development;
- recommendations for action.

The recommendations are based on a three-dimensional prevention model covering the stage, the level and the orientation of each intervention, including reactive and proactive measures at three levels:

1. to prevent abuse from happening at all;
2. to encourage prompt recognition and investigation and to prevent recurrence of abuse; and
3. to provide treatment for people who have been abused.

S79.03

Inhuman and degrading treatment in four EU Accession Countries
O. Lewis*. *Mental Disability Advocacy Center (MDAC), Budapest, Hungary*

This paper will outline the Mental Disability Advocacy Center's campaign to end the use of cage beds in the Czech Republic, Hungary, Slovakia and Slovenia. These countries within the enlarged EU systemically use cage beds - netted or metal cages enclosing a hospital bed - in psychiatric and social care institutions. The circumstances in which cage beds are used will be described, as will the justifications given by staff and testimony of victims of cage bed use. The presentation will emphasize that cage beds are symptomatic of broader issues of institutionalized systems of custodial care, which places little emphasis on integration and (re)habilitation. The use of cage beds violates the absolute prohibition in international law of inhuman and degrading treatment. The demands of the United Nations, Council of Europe and European Union to eradicate this widespread and dangerous form of restraint will be outlined. The presentation will outline the extent to which these countries' governments have taken steps to meet their international legal obligations to eradicate cage bed use.

S79.04

The mental health consequences and extent of collective violence
M.C. Kastrup*. *Centre Transcultural Psychiatry, Copenhagen, Denmark*

According to the UN Convention of 1984 against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment Article 10,

states having signed the Convention shall ensure that education and information regarding the prohibition of torture are included in the training of e.g. medical personnel who may be involved in the custody, or treatment of individuals deprived of their liberty. Unfortunately, few countries enforce this, implying that few psychiatrists receive any such education and thus have little knowledge on the issue of torture. Knowledge about the mental health consequences of collective violence, including torture is of clear clinical relevance for European psychiatrists as a significant proportion of e.g. refugees and migrants have experiences of war, strife, persecution and torture. The paper will outline the psychiatric symptomatology following collective violence, prevailing therapeutic models, preventive considerations as well as educational needs for the psychiatric profession.

Free Communications: Psychotic Disorders II

14:15 – 15:45, Hall G

Antipsychotic drug effects on glucose, lipids, and leptin in schizophrenic patients

J.-P. Lindenmayer^{1,*}, R. Smith¹, N. Bark², J. Warner-Cohen³, S. Waidhyanathaswamy³, A. Khandat⁴. ¹*Department of Psychiatry, New York University.* ²*Albert Einstein College of Medicine, Bronx Psychiatric Center.* ³*Manhattan Psychiatric Center, New York.* ⁴*Indiana University School of Medicine, Indianapolis, IN, USA*

Some reports have indicated increased rates of diabetes and increased prevalence of glucose and lipid abnormalities during treatment with second generation antipsychotics.

Objective: To determine whether there are significant differences in glucose and lipid fasting metabolic measures in patients treated with olanzapine, clozapine, risperidone and conventional antipsychotics.

Methods: In a cross-sectional study design patients treated with a single antipsychotic medication were consecutively entered. Fasting glucose, lipids, and leptin were obtained on two separate days. Patients who had higher fasting glucose (=110 mg/dl) received a GTT. 210 patients with schizophrenia or schizoaffective disorder, currently treated with olanzapine, clozapine, risperidone, or a conventional antipsychotic for at least a month, who were not currently treated with an antidiabetic drugs, were evaluated.

Results: Most mean fasting glucose and lipid levels were within normal range and were not significantly different among the four drug treatment groups. Patients treated with clozapine and olanzapine had higher triglyceride levels than risperidone patients. Patients on risperidone had higher glucose levels 1 hour after a 75-gm glucose load than olanzapine patients and there more risperidone patients met ADA glucose metabolic criteria for diagnosis of diabetes.

Conclusions: There was little difference between fasting glucose and lipid metabolic indices of patients treated with conventional antipsychotics and three second generation antipsychotics. Olanzapine and clozapine did not produce more glucose and insulin abnormalities than risperidone or conventional antipsychotics but had higher triglyceride levels.

Relationships between BDNF and NTF3 gene variants and brain volumes assessed by magnetic resonance imaging

I. Agartz*, E.G. Jönsson, A. Sillén, B. Edman-Ahlbom, A. Gunnar, G. Okugawa, C. Tamagaki, M. Vares, B. Ekholm, H. Hall, G.C. Sedvall, L. Terenius. *Department of Clinical Neuroscience, Human Brain Informatics Project, Karolinska Institute and Hospital, Stockholm, Sweden*

Genetic factors have been shown to be of importance in schizophrenia. Disturbances in neurodevelopment have been suggested as a putative pathologic mechanism of the disorder. Brain derived neurotrophic factor (BDNF) and neurotrophin-3 (NTF3) belongs to the neurotrophins, a family of growth factors promoting neuronal survival and differentiation.

Objective: To investigate associations between BDNF and NTF3 gene variants and brain morphology in chronic schizophrenic patients and healthy subjects.

Method: Segmented grey, white, and CSF tissue class volumes of frontal, occipital, temporal, parietal regions and total brain volume were obtained using 1.5 Tesla magnetic resonance (MR) imaging and image analysis methods. MR volume data from parcellated cerebellar vermis subregions and hemispheres was investigated. BDNF and NTF3 genotyping was performed using PCR and pyrosequencing techniques.

Results: In 109 schizophrenic patients, compared with 106 control subjects, CSF of total brain, frontal lobe, and ventricular volumes were increased ($p < .001$). Bilateral frontal white matter and temporal grey matter were reduced ($p < .002$). There were no significant differences in BDNF Val66Met variation between schizophrenic patients and control subjects. In preliminary analyses of 142 subjects, the BDNF Val66Met polymorphism tended to be associated with parietal white matter ($p < .01$) and occipital grey matter ($p < .04$) variation. Among 107 individuals there was a trend for an association ($p < .02$) between the BDNF Val66Met polymorphism and the cerebellar vermis. Further results from the statistical evaluation of the relationships between BDNF and NTF3 genotypes and brain measurements will be presented.

Neuropsychological function at age 13 and later schizophreniform disorder in a longitudinal birth cohort

M. Cannon^{1,*}, T.-E. Moffitt², A. Caspi², H.-L. Harrington³, R.M. Murray⁴, R. Poulton⁵. ¹Royal College of Surgeons of Ireland, Department of Psychiatry, Beaumont Hospital, Dublin, Ireland. ²Social, Genetic and Developmental Psychiatry Research Centre, Institute of Psychiatry, London, UK. ³University of Wisconsin, Madison, WI, USA. ⁴Division of Psychological Medicine, Institute of Psychiatry, London, UK. ⁵Dunedin Multidisciplinary Health and Development Study, University of Otago School of Medicine, Dunedin, New Zealand

There is compelling evidence that individuals with schizophrenia exhibit impairment on a wide range of neuropsychological tasks notably those involving attention, language and memory. However it is not known whether such deficits predate the diagnosis. The Dunedin Multidisciplinary Health and Development Study is an unselected prospective birth cohort of 1037 individuals born in Dunedin, New Zealand between April 1 1972 and March 31, 1973. Study members have participated in ten assessments between ages 3 and 26 including a neuropsychological test battery at age 13. Of the 850 cohort members who participated in the study at age 13,

complete neuropsychological assessment data is available on 710 subjects. Psychiatric diagnostic interviews conducted at age 26 revealed that 21 of these individuals fulfilled diagnostic criteria for schizophreniform disorder, 10 for a mania and 198 for depressive disorder or anxiety disorder. Study members with a subsequent diagnosis of schizophreniform disorder performed significantly worse than the other groups at age 13 on the Trails B test (time to completion), the Grooved Pegboard test (both left and right hands), and the Rey Auditory Verbal Learning Test (delayed recall and recognition). No significant differences were noted between the groups on the Rey Osterreith Copy score, the Wisconsin Card Sort Test or on Verbal Fluency. These results indicate that deficits in executive functioning, verbal memory, learning and psychomotor speed precede the onset of schizophrenia in a representative birth cohort.

Quetiapine in psychotic patients with borderline personality disorder: A case series

T. Grüttert^{1,*}, L. Friege². ¹Department of Psychiatry and Psychotherapy, Florence Nightingale Hospital, Düsseldorf. ²Department of Psychiatry and Psychotherapy, Christian-Albrechts University, Kiel, Germany

Introduction: New antipsychotics for borderline patients are connected to better reduction of symptoms, tolerability and a wider spectrum of efficiency. Reflecting the most positive side effect spectrum of quetiapine we initiated a case series with quetiapine in psychotic BPD.

Design: Currently (14/d) psychotic outpatients with BPD were examined both before and 4 and 12 weeks after treatment with quetiapine. BPD Patients consecutively included in this uncontrolled open label study after check for exclusion criteria and informed consent.

Questionnaires: This short test battery reflect procedures all suitable to measure changes: HDRS, GAS, BIS, SCL-90 Scale Psychoticism, CGI.

Sample: 12 ambulatory female patients with BPD were examined.

Results: For all variables (CGI, GAS, BIS, HAMD, SCL-90-P) Page's trend test was significant ($p < 0.01$). Wilcoxon tests with adjusted alpha error showed significant improvements for all variables with the exception of HAMD as early as after 4 weeks. All variables showed significant improvement after 12 weeks compared to baseline. Between week 4 and 12, however, further significant improvement was observed only for HAMD, BIS and GAS. The correlation between the quetiapine dose and CGI at the last time point of measurement (after 10 months) was -0.632 ($p = 0.027$), and the correlation between quetiapine and CGI total -0.825 ($p = 0.002$)!

Discussion: CGI and SCL-90-P showed rapid improvement within the first 4 weeks, thereafter only minor (not significant) increases. Significant correlation can be shown between CGI and quetiapine dose after 12 weeks. Here a dose-effect relation is evident not however for the other measures.

Dysfunctional information processing during acute psychosis

L.N. Timchenko^{1,*}, O.Yu. Mayorov¹, A. Glukhov¹, D.W. Sleduk¹, S.M. Kosidubova¹, V. Semenina², M. Fritzsche³. ¹Institute of Children and Adolescent Health, Postgraduate Medical School, National Academy of Medical Science, Kharkiv, Ukraine. ²Psychiat-

ric University Clinic, Basel. ³Clinic for Internal Medicine, Adliswil, Switzerland

Occasional consumption of tetrahydrocannabinol (THC), the pharmacologically most active ingredient of cannabis, appears to have few harmful effects. Its abuse, however, often triggers a relapse of psychotic symptoms in schizophrenic patients, and in vulnerable individuals, THC may increase the risk of developing schizophrenia. There is therefore a need for reliable diagnostic tests allowing the development of prophylactic and early therapeutic interventions. Since schizophrenia and intoxication with THC induce characteristic distortions in the perception of time, suggesting a common psychotic dysfunction, this electroencephalographic pilot study focuses on Kolmogorov entropy as a quantifiable measure of information flow across time and its correlation to other non-linear parameters such as embedding dimensions (Shannon entropy). To induce a schizophrenia-like model psychosis in self-experiment, the authors ingested THC as well as the metabolically stable form of the endogenous CB1 receptor agonist fluoro-methyl-anandamide. The ensuing psychotic episodes characterized by hallucinations and delusions were recorded by a digital 24 channel EEG at 400Herz and subsequently computed by the latest non-linear programs of NeuroResearcher (R) ' 2003. In a limited number of model psychoses as well as acute schizophrenic patients, the preliminary data constitute the first direct assessment of altered processing of information during which, after a transient increase, Kolmogorov entropy appears to decrease by 95% of its initial value. In the search for candidate genes and the protection of vulnerable individuals from cannabis abuse, non-linear analysis of Kolmogorov information could thus present us with a novel diagnostic tool to assess the psychotic breakdown of mental information processing directly.

Predictive value of cognitive and behavioural particularities in young experiencing the first episode psychosis

A.V. Baloescu*, M. Gheorghe, G. Grigorescu. *Psychiatric Department, Central Military Hospital, Bucharest, Romania*

Background: The purpose of this study was to evaluate premorbid cognitive and behavioural particularities and determine if such abnormalities could be used as diagnose markers of future illness.

Methods: Premorbid data of young male patients (N = 73) admitted in Military Hospital between 1998-2002, for first psychotic episode and schizophreniform disorder, were analyzed using retrospective methods. Data consisted in the assessment of intellectual functioning (Raven Progressive Matrices) and personality traits (Eysenck Personality Questionnaire and a MMPI version with 100 items) important for social functioning, individual autonomy and organizational ability. Patients were compared with nonpatients (N = 72), matched for age, gender, education and geographic area. The results were analyzed with SPSS 8.0 version. Test scores were collected at ages 18 and 20, when young people are called to conscription.

Results: Young and apparently healthy males, later admitted for first psychotic episode or schizophreniform disorder, presented significantly lower scores at IQ test and relevant personality traits, suggesting behavioural particularities that could be used to identify the young in risk for psychosis.

Conclusions: Results sustain the hypothesis of schizophrenia as a neurodevelopment disorder, particularities of the disease being present before the clinical onset. Regarding the experience in mili-

tary psychiatry and psychology, correlated with traits of military environment, perceived as rigid and stressful, data about vocational status, family history of psychiatric disorders, low intellectual level and certain behavioural changes, detected by scores of personality tests, could represent a cumulated risk to develop a psychotic episode, needing adequate measures.

S52. Symposium: Evidence Based Psychiatric Services Management

Chairpersons: Juan J. López Ibor (Madrid, Spain), Blanca Reneses (Madrid, Spain)

14:15 – 15:45, Hall H

S52.01

Experience with the matrix model in planning psychiatric services in Europe

G. Thornicroft¹*, M. Tansella². ¹*Institute of Psychiatry, Health Services Research Department, Section of Community Psychiatry, Kings College London, UK.* ²*Instituto di Psichiatria, Servizio di Psicologia Medica, Università di Verona, Verona, Italy*

The modernisation of mental health services in Europe needs to be guided by an overall conceptual framework. Such a framework is important to avoid many risks, including extrapolating from a specific service site to other services, without taking into account local and regional variables. A conceptual framework, the 'matrix model', is proposed. It has two dimensions: the geographical, which refers to three levels (country, local and patient) and the temporal, which refers to three phases (inputs, processes and outcomes). The relevance of each level and each phase is briefly presented. This matrix model is intended to assist clinicians, planners and researchers to deal with clinical phenomena, organisational issues, and research questions that share a degree of complexity which render inadequate analyses and the interventions made only at one level. The matrix model applies particularly to mental health systems of care which are provided within a public health framework, and is less useful for contexts which consist of clinicians offering only one-to-one treatments, within fragment programmes of care. This model related to a wider concept of 'balanced care', which is now replacing previous approaches which relied upon hospital-based care or community-based care alone. Balanced care includes both modern community-based and modern hospital-based care. In balanced care the focus is upon services provided in normal community settings, as close to the population served as possible, and where admissions to hospital can be arranged promptly, but only when necessary.

S52.02

Evaluating a community-based mental health service

M. Tansella*. *Department of Medicine and Public Health, Section of Psychiatry, Policlinico G.B. Rossi, University of Verona, Italy*

A series of long-term evaluative studies conducted in South Verona, Italy, where a new community-based mental health service (CMHS) was set up in 1978, to provide care and support to all patients in the at-risk population (100000 inhabitants) will be presented. This service is not experimental and was implemented by national law; it

avoids restrictive selection procedures for patients and includes a 15-bed ward in a general hospital, as well as out-patient departments, a Community Mental Health Centre, apartments, a 24 hour supervised hostel, an emergency service and rehabilitation programmes. Continuity of care, a longitudinal perspective, and a balanced hospital-community care are ensured to all those in need. For monitoring the provision of psychiatric care, a Psychiatric Case Register (PCR), which covers the same geographical area, has been operating since 31 December 1978. After presenting some results on patterns of care, collected over the last 30 years using the PCR, results of naturalistic studies, conducted on various cohorts of patients with schizophrenia, followed up for 3-4 or 5 years, will be summarised. The assessment of outcome of psychiatric care was made using well standardised instruments for evaluating quality of life, needs for care, satisfaction with services and costs, as well as psychopathology and disability. Ratings made both by staff and patients were collected. All those still in contact as well as patients no more in contact with our Service were traced and evaluated. The results of studies on costs of psychiatric care, completed in the last decade, will also be mentioned.

S52.03

Assessing psychiatric services in Europe: A difficult task

J.M. Bertolote*. *Department of Mental Health and Substance Dependence, WHO, Geneva, Switzerland*

Until some 25 years ago the assessment of mental health services was performed from the viewpoint of providers only; also it was done in a system with the large psychiatric hospital at its centre, if not the only type of facility available. Finally, services were based on practically two types of providers: doctors and nurses. The psychiatric reform movement initiated in Italy in the 1980s, and which spread out to several other European countries, brought a major change to this situation, eliminating the predominant role of the traditional psychiatric hospital and creating a series of less institutionalized therapeutic spaces, fully integrated into the local community and reflecting many of its values. At the same time, the range of professional staff involved in mental health activities broadened to include several professions that, although existing elsewhere (e.g. occupational therapists, clinical psychologists) were not available locally. Finally, as part of a much larger movement of democratization and of promotion of the respect for the rights of people with mental disorders, these acquired a much greater saying in the planning, running and evaluation of mental health services. All this diversity brought specific challenges for the assessment of those services, and particularly for their comparison across regions and countries. These challenges and some examples of their successful overcoming will be presented and discussed.

S52.04

Evidence based clinical management

B. Reneses^{1,*}, J.J. López-Ibor². ¹*Servicio de Psiquiatría. ²Departamento de Psiquiatría y Psicología Médica, Hospital Universitario San Carlos, Servicio de Psiquiatría, Universidad Complutense, Madrid, Spain*

Consensus on the benefits of evidence-based medicine in the clinical field is nowadays very wide. Unfortunately, this principle has not already reached sufficiently the field of mental health services planning and management. One of the main difficulties to achieve

this is the lack of appropriate information systems oriented to decision-making. The implementation of this paradigm of thought to services management has several levels and dimensions. Our presentation will discuss the advantages and difficulties of putting into practice an evidence-based clinical management model in the Psychiatric Service level. The evolution of a mental health services network in Madrid will be analysed and the pathway from a traditional management and organization to a new one based in managed care and knowledge management.

S77. Symposium: Human Hemispheric Asymmetry and Specialisation as a Key for Understanding Psychoses

Chairpersons: Werner K. Strik (Bern, Switzerland), Timothy J. Crow (Oxford, UK)

14:15 – 15:45, Hall I

S77.01

Haemispheric specialisation as a key to the neurophysiology of psychosis

W.K. Strik*. *University Hospital of Clinical Psychiatry, Bern, Switzerland*

Some of the highest human brain functions are lateralized in the human brain. This is to be understood as hemispheric preferences and specialization, not as exclusive locations. Examples are language (left), face decoding (right), long-term planning and emotion control (right), and prosody decoding (right). The respective cortical systems can be destroyed by organic pathology, with loss of the respective function. Slight dysfunctions, on the other hand, may result in communication problems with severe social consequences as is the case in schizophrenia. Neurophysiological studies gave hints to distinct mechanisms of acute (cyloid) psychosis compared to chronic schizophrenia and manic psychosis. Chronic schizophrenia displays signs of left hemispheric deficits along with language deficits. If hallucinations were present, functional activation of the primary auditory cortex was demonstrated during activity of the left frontal lobe, and the fibre connections between the left frontal and the temporal lobe were increased. This indicates pathological coactivation of the primary auditory cortex during inner speech due to abnormalities of connectivity. This results in the psychopathological phenomenon of the loss of 'self' attributed to the own thoughts along with their sensory perception.

S77.02

ProtocadherinX & Y - a gene pair for cerebral asymmetry

T.J. Crow*, N.A. Williams. *Sane Powic, Warneford Hospital, Oxford, UK*

On the basis of the neuropsychological deficits associated with sex chromosome aneuploidies a gene for asymmetry in the non-recombining regions of homology between the X and Y chromosomes was proposed. Within the Xq21.3/Yp region of homology that was created by a duplicative translocation in the course of hominid evolution a gene pair (ProtocadherinX and Y) has been identified that codes for two forms of a cell surface adhesion molecule that is expressed in brain. In comparisons of the gene

sequence with that of the great apes we have shown that the ectodomain of the X sequence and the cytodomain of the Y sequence have been under positive selection (selection for change) in the course of hominid evolution. This gene pair is therefore a candidate determinant of those characteristics such as cerebral asymmetry, language and predisposition to psychosis that distinguish *Homo sapiens* from our closest relatives the chimpanzees, gorilla and orang outang.

S77.03

Cingulate and hemispheric variations in subjects with schizophrenia: Structure-function relationship

J.L. Martinot*, E. Artiges, M.L. Paillere-Martinot, D. Bartés-Faz, M. Plaze, D. Ringuenet, J.B. Leprovost, A. Cachia. *Brain Imaging Research Team INSERM - CEA ERM 02-05, Orsay, France*

The anterior cingulate and paracingulate cortex is an anterior paralimbic epicentre involved in the cognitive and emotional functions impaired in schizophrenia. Cingulate dysfunction has been reported in schizophrenia patients, using functional brain imaging and cognitive tasks tapping language, or working memory (e.g.: 1, 2). We reported its dysfunction when stimuli induced a conscious conflict, whereas subliminal conflict processing was preserved (3). Using structural brain imaging we investigated whether cingulate abnormalities are confined to distorted functioning, or involve abnormal local architecture. In a sample of subjects with early-onset schizophrenia, grey matter density decrease was detected by voxel-based morphometry in several left hemisphere regions, including medio-frontal cortex; also, white matter in pericingulate regions was negatively related to the negative symptoms (4). The simple inspection of the paracingulate sulcus (PCS) on MRIs, confirmed that patients displayed significantly less asymmetrical PCS patterns and less developed left PCS than healthy subjects, (5). In a patient sample studied with both morphological and functional MRI, two subgroups of patients were defined according to the presence or absence of a PCS. Hypoactivations during conflict monitoring were observed only in patients devoid of a PCS (6).

Conclusions: in patients, the anterior paralimbic sulco-gyral structure might modulate the regional functional activations.

Références

- [1] Schizophrenia Bulletin 2000;26:709–21.
- [2] Am J Psychiatry 2000;157:1517–9.
- [3] PNAS 2003;100:13722–7.
- [4] Schizophrenia Research 2001;50:19–26.
- [5] British J Psychiatry 2003;182:228–326. Artiges et al; submitted.

S77.04

Abnormal lateralisation of tone and language processing in schizophrenia

T.T.J. Kircher*. *Department of Psychiatry, University of Tübingen, Germany*

Alterations in thought and language are core symptoms of schizophrenia. Studies with structural and functional imaging (fMRI) as well as magneto / electroencephalography (EEG, MEG) on language in schizophrenia will be selectively described. A model will be presented, where brain structure, function, receptor chemistry,

cognitive deficits and psychopathology of language related phenomena are integrated. A diffuse brain trauma (genetic, viral) during fetal neurodevelopment results in pathological cell migration, mediated through Relin, within the superior temporal gyrus. Consequently, alterations of the glutamate receptor system and decreased mismatch negativity have been described in schizophrenia. These structural and biochemical changes result in a dysruption of the normal cerebral language lateralisation during childhood. As a result, the mental lexicon, normally in the left superior temporal gyrus, is reversed in adult schizophrenic patients. The production of thought disordered speech is in part due to a decreased activation of the Wernicke Area and the recruitment of the right mental lexicon with its diffuse semantic fields.

S77.05

Atypical hemispheric specialization for language in schizophrenic patients

S. Dollfus^{1,2,*}, A. Razafimandimby², N. Tzourio-Mazoyer², P. Delamillieure^{1,2}, P.Y. Hervé², P. Brazo^{1,2}, M. Joliot², B. Mazoyer^{2,3}. ¹Centre Esquirol, ²Groupe Imagerie Neurofonctionnelle, UMR 6095 CNRS, Centre Cycecon, Bl H Becquerel, ³IRM CHU Caen, Institut Universitaire de France, Caen, France

Literature supports the hypothesis that schizophrenia could be related to lateralized brain dysfunction but few functional cerebral imaging studies have explored language processing in schizophrenia and none has researched specifically changes in specialization of language cortical areas.

Aim: The hypothesis was that schizophrenia is characterized by a functional change in the hemispheric specialization for language.

Methods: Twenty one right-handed schizophrenic patients (DSM-IV) and 21 controls, matched on sex, age and level of education were instructed to listen to stories in French and Tamil alternately during functional magnetic resonance imaging. Bold signal was computed in Anatomical Regions of Interest (AROs) involved in language processing. An ANOVA allowed us to detect the regions that were the seat of a Side x Group interaction.

Results: Interactions were significant in cortical language areas: the pars triangularis of the inferior frontal gyrus (F3t), the middle temporal gyri, and the angular gyrus. In these regions, activated as a mean, the left hemisphere values were lower in patients compared to controls.

Conclusion: This study supports the hypothesis that schizophrenia is characterized by a reduced left hemisphere activity in speech processing regions dedicated to semantic processing.

S14. Symposium: Neurobiology of Schizophrenia: Focusing on Clinical Subtypes and Specific Symptoms

Chairpersons: Silvana Galderisi (Naples, Italy), Werner K. Strik (Bern, Switzerland)
16:15 – 17:45, Hall A

S14.01

MRI, neuropsychological and genetic findings in deficit and non-deficit schizophrenia: A multicentre study

S. Galderisi^{1,*}, M. Del Zompo², G. Invernizzi³, S. Pini⁴, M. Quarantelli⁵, A. Rossi⁶, P. Cassano⁴, G. Severino², P. Stratta⁶, A. Vita⁷,

U. Volpe¹, M. Salvatore⁸, M. Maj¹. ¹Department of Psychiatry, University of Naples SUN. ²Department of Neurosciences B.B. Brodie, University of Cagliari. ³Department of Clinical Psychiatry, University of Milan. ⁴Department of Psychiatry, Neurobiology, Pharmacology and Biotechnologies, University of Pisa. ⁵Institute of Biostructures and Bioimaging, National Council for Research, Naples. ⁶Department of Experimental Medicine, University of L'Aquila. ⁷Department of Mental Health, S. Maria Delle Stelle Hospital, Melzo (MI). ⁸Diagnostic Imaging, University of Naples, Italy

The results of a recent Italian multicenter study (1) confirm that the diagnosis of deficit schizophrenia (DS) identifies a subtype of schizophrenia characterized by primary and enduring negative features. Subjects with DS have poorer premorbid adjustment, worse outcome, more severe neurological signs and a different pattern of neuropsychological dysfunctions as compared to those with nondeficit schizophrenia (NDS). Recent findings from this study suggest that neurological impairment is differently influenced by genetic factors in the two patient groups: COMT polymorphism and motor impairment share 10–12% of the variance in patients with DS, but do not share any variance in those with NDS. MRI findings available in a subsample of the whole study group demonstrate that patients with NDS have a greater reduction of grey matter and larger lateral ventricles and thalamus volumes than those with DS. In the latter group the volume of cerebellum hemispheres is larger than in the NDS one. Neurological, neuropsychological and structural MRI findings from the Italian multicenter study do not support the hypothesis that DS represent the more severe end of a single disease continuum, and suggest that different developmental pathways underlie DS and NDS.

Référence

- [1] Galderisi S, Maj M, Mucci A. et al. *Am J Psychiatry* 2002;159:983–90.

S14.02

The neurophysiology of clinical subtypes of psychoses

W.K. Strik*. *University Hospital of Clinical Psychiatry, Bern, Switzerland*

Differential diagnosis and prognosis of psychotic disorders is still a major issue in Psychiatry due to a lack of validity of the current clinical syndromes. In fact, conclusions based on the diagnosis as to differential therapy and prognosis are very limited, although reliability has improved with the operational classification systems. With topographical analysis of cognitive evoked potentials it was possible to define possible neurophysiological mechanisms of schizophrenic, schizophrenia-like and affective psychoses which were useful to better understand clinical subgroups of schizophrenia and may give hints for future classifications and clinical studies. In particular, cycloid psychosis was related to signs of generalized arousal, chronic schizophrenia to left hemispheric functional deficits and manic psychosis to frontal disinhibition. Spatial electrophysiological methods can help to distinguish clinically meaningful subgroups of schizophrenia, to understand the neurophysiological mechanisms of different types of functional psychosis, hopefully with future improvements in the usage of therapeutic drugs. The possible value of the EEG in the prediction of the therapeutic response to neuroleptic drugs will be discussed.

S14.03

Functional disturbances of language related networks during auditory verbal hallucinations in schizophrenia

T. Dierks*, T. Koenig, W. Strik, D. Hubl. *University Hospital of Clinical Psychiatry, Bern, Switzerland*

The exact neurobiological correlates of hallucinations are a matter of intensive debate. In a previous fMRI study we found evidence that, besides directly speech related brain areas like Broca's area, primary auditory cortex (pac) as well as auditory association areas are involved in the generation of auditory verbal hallucinations. These cortical areas are known to be inhibited during internal speech in normal subjects; consequently we postulated that the co-activation of pac during internal speech could be one reason for the conviction of hallucinating patients that their acoustical sensations are generated externally and not internally. Furthermore we investigated if these earlier observed cerebral blood flow changes in hallucinating schizophrenic patients have a corresponding equivalence in the electrical brain activity using spontaneous EEG and auditory evoked potentials. During the hallucinations we found an increased beta EEG activity in the left superior temporal gyrus (using LORETA source localization) and reduced amplitude of the AEP N100 component. Thus we found combined metabolic and electrophysiological evidence for increased neural activity in auditory cerebral areas including primary cortex during hallucinations. These results together with structural information gained by MR diffusion weighted imaging made us hypothesize that dysfunctional connections in language related cerebral networks lead to an abnormal co-activation of neurons in pac leading to the phenomenon that hallucinating patients conceive internal generated speech as if it was coming from outside.

S14.04

Proton magnetic resonance spectroscopy of prefrontal cortex in deficit and non-deficit schizophrenia

P. Delamillieure^{1,*}, J.M. Constans², J. Fernandez², P. Brazo¹, S. Dollfus¹. ¹Groupe d'Imagerie Neurofonctionnelle, UMR 6095 CNRS/CEA/Universités de Caen et Paris V et Centre Esquirol. ²Centre IRM, CHU de Caen, France

Schizophrenia can be conceptualized as a syndrome constituted of subtypes characterized with distinct pathophysiological processes. Among these subtypes, deficit schizophrenia is characterized by primary enduring and stable negative symptoms. It is a homogeneous subtype underlain by particular pathophysiological characteristics. Few reports are available in brain imaging in deficit schizophrenia. These studies reported structural and functional abnormalities in the prefrontal cortex of deficit schizophrenic patients. Proton Magnetic Resonance Spectroscopy (1H-MRS) can provide further information by studying some cerebral metabolites. The aim of this study was to test with 1H-MRS, that deficit schizophrenic patients can be characterized by brain metabolite changes such as a decrease of N-Acetyl-Aspartate/ Creatine (NAA/Cr) and/or an increase of Myoinositol/Creatine (mI/Cr) or Choline/ Creatine (Cho/Cr). Methods: Twenty-two schizophrenic patients (DSM IV) were categorized into deficit (N=5) and non-deficit (N=17) patients with the Schedule for Deficit Syndrome. Twenty-one healthy subjects were included. Proton spectra were studied in the right and left prefrontal cortex. Results: The deficit patients had significant lower ratios of NAA/Cr than the nondeficit patients and

healthy subjects ($p=0.006$). No group differences were noted regarding Cho/Cr or mI/Cr. Conclusion: As the NAA reflects neuronal density and/or viability, this finding might suggest a neuronal lost and/or dysfunction in the prefrontal cortex in deficit patients. This decrease of NAA/Cr was not associated with an increase of Cho/Cr or mI/Cr and did not suggest a neurodegenerative process.

S10. Symposium: Neuropsychopharmacology in Schizophrenia: Neuroimaging Strategies for Evaluation of Treatment Response

Chairpersons: Dieter F. Braus (Hamburg, Germany),
Eva M. Meisenzahl (Munich, Germany)
16:15 – 17:45, Hall B

S10.01

Pharmacological modulation of working memory functions in schizophrenia: Studies with fMRI

R. Schlösser*. *Department of Psychiatry, University of Jena, Germany*

The present sequence of fMRI studies examined the hypothesis of altered effective connectivity in schizophrenia within a defined cortical-subcortical-cerebellar network subserving working memory functions. Additionally, the studies aimed to elucidate whether a characteristic signature for atypical properties of antipsychotic drugs in terms of a specific pattern of effective connectivity could be identified. Twelve schizophrenic patients treated with either typical or atypical antipsychotics and 6 drug-free schizophrenic patients were studied with fMRI while performing a 2-back working memory task. Cortical-subcortical-cerebellar effective connectivity was examined with structural equation modeling (SEM) using AMOS 4.0. Schizophrenic patients demonstrated reduced interhemispheric corticocortical connectivity as compared to normal controls. This finding is consistent with studies indicating altered integrity of interhemispheric fiber tracts and the contention of schizophrenia as a "transcallosal misconnection syndrome". The observation of reduced interhemispheric path coefficients was less pronounced in patients receiving atypical antipsychotic drugs. Therefore, integrity of interhemispheric large scale synchronization might be associated with the favorable effects of atypical drugs on cognitive functions. A finding of enhanced thalamo-cortical connectivity in schizophrenic patients relative to controls was not related to treatment status. The findings provided evidence that the atypical profile of antipsychotics is associated with a differential functional connectivity pattern on the system level. Schlösser R, et al. (2003) Altered effective connectivity during working memory performance in schizophrenia: a study with fMRI and structural equation modeling. *Neuroimage* 19: 751-63. Schlösser R, et al. (2003) Altered effective connectivity in drug free schizophrenic patients. *Neuroreport* 14: 2233-7

S10.02

Typical and atypical antipsychotics: Affinity and occupancy at the striatal dopamine D2 receptor and transporter

G.J.E. Schmitt^{1,*}, E.M. Meisenzahl¹, T. Frodl¹, S. Dresel², C. la Fougère², K. Hahn², H.-J. Möller¹. ¹*Department of Psychiatry.*

²*Department of Nuclear Medicine, LMU University of Munich, Germany*

Understanding the mode of pre- and postsynaptic regulation of striatal dopamine, especially the influence of neuroleptic therapy, seems to be one of the challenges of research in schizophrenia. Combineable radioligands of the pre- and post-synaptic side of the dopaminergic synapse are a new tool for getting deeper insight in the schizophrenic illness and effects of therapy in vivo. With a new SPECT-ligand to the presynaptic dopamine transporter (DAT), the 99mTc-labelled TRODAT-1, together with the well known postsynaptic D2-receptor ligand 123I-IBZM a technique for the simultaneous analysis pre- and postsynaptically of the striatal dopaminergic synapse is available now. In our study we analyzed pre- and postsynaptic binding at the striatal dopaminergic synapse after a fourteen days steady state treatment of schizophrenic patients with amisulpride in a high (350-1200 mg/day) and a low dose range (50-300 mg/day). We compared D2-occupancy and DAT-occupancy between patients treated with amisulpride and haloperidole (4-20 mg/day). We found a D2-occupancy of 76.4% in the whole amisulpride dose range, with 79.5% in the high dose and 72.7% in the low dose range. The haloperidol treated patients showed 85.7% D2-occupancy. DAT-occupancy with endogenous dopamine increased dose dependently, with a significant difference between the amisulpride low dose and the haloperidol treated patients. Additionally, even in the amisulpride high dose range with high D2-occupancy, patients produced less EPS than the haloperidol treated ones. Data are discussed with respect to binding theories of neuroleptics to the postsynaptic dopamine D2-receptor.

S10.03

Elucidating the mechanism of action of antipsychotic drugs with PET

G. Gründer*. *Department of Psychiatry, University of Mainz, Germany*

Almost fifteen years of research with Positron Emission Tomography (PET) and Single Photon Emission Computed Tomography (SPECT) have led to a profound understanding of the relationships between antipsychotic doses and plasma levels on the one hand and occupancy of (striatal) D2-like dopamine receptors on the other hand as well as with the associated clinical effects and side effects. Furthermore, with the development of clinically "atypical" antipsychotics, PET studies helped to generate hypotheses regarding the essential pharmacological properties of this heterogeneous class of drugs. Possible mechanisms of action include combined D2-/5-HT2 antagonism, preferential mesolimbic binding, and fast dissociation from the D2 receptor. Recently, our in vivo characterization of the partial dopamine receptor agonist, aripiprazole, suggested another novel mechanism of action, which leads to clinically "atypical" properties of an antipsychotic. Furthermore, with the comparison of striatal and extrastriatal D2 binding of antipsychotics by means of novel radioligands it became possible to link antipsychotic actions to extrastriatal rather than striatal binding. For clozapine, we have determined an ED50 in temporal cortex of approximately 350 ng/ml, which represents the plasma level that has been established to be the threshold for antipsychotic efficacy of clozapine. Finally, with [18F]FDOPA-PET we could demonstrate that subchronic treatment with haloperidol downregulates dopamine synthesis capacity in schizophrenic patients, while this parameter is unchanged after acute administration of haloperidol to normal volun-

teers. In conclusion, there are multiple mechanisms of action of antipsychotic drugs, but it remains obvious that antagonism of D2-like dopamine receptors is necessary but not sufficient for antipsychotic efficacy.

S10.04

MR-Spectroscopy: Useful for the evaluation of treatment effects?

D.F. Braus*, W. Weber-Fahr. *NeuroImage Nord (Nin) and Clinic for Psychiatry and Psychotherapy, University of Hamburg, Germany*

Magnetic resonance spectroscopy (MRS) is one of the techniques that is becoming increasingly available in most MRI units and its application to psychiatry is receiving more attention, especially with imagers operating at field strength at or above 3 Tesla. MRS relies on the same nuclear magnetic resonance principles as MRI and functional MRI, but allows the relative quantification of certain compounds and their constituents in predefined brain regions. This metabolic information can be used to define the nature and extent of brain diseases, such as schizophrenia, dementia and affective disorder. In addition MRS has been used to examine neuronal functional integrity in experimental stress conditions in non-human primates. In the last few years research application of MRS in psychiatry focuses on the understanding of the basic brain function as well as towards the monitoring of treatment effects. In schizophrenic patients antipsychotic drugs (especially atypicals) seem to increase N-acetylaspartate (NAA), an intraneuronal marker of neuronal functional integrity, in frontal areas, suggesting that these drugs may modify the function of cortical neurons. In our sample the MRS correlated with functional imaging (fMRI) pattern as well as the change in deformation based morphometry data. Ongoing improvements and refinement in MRS techniques as well as in morphometry will ameliorate both spatial and temporal resolution. With greater standardization of (1) MRS/Morphometry procedures, (2) of the quality control of the hardware, (3) of artefact detection and (4) better methods for interpretation of results, these non-invasive methods will play a unique role in the research toward an understanding of treatment effects in psychiatry.

S33. Symposium: ADHD through Lifespan: Childhood, Adolescence, Adulthood

(Organised by WPA Section of Child and Adolescent Psychiatry)

Chairpersons: Barry Nurcombe (St. Lucia, QLD, Australia), Sam Tyano (Petach Tikva, Israel)
16:15 – 17:45, Hall C

S33.01

Genetic study in ADHD in families

I. Manor^{1,*}, R.P. Ebstein², S. Tyano¹. ¹*ADHD Unit, Geha Mental Health Center, Petach Tikva.* ²*Herzog Mental Health Center, Laboratories, Jerusalem, Israel*

Attention deficit and hyperactivity disorder (ADHD) is a frequent developmental syndrome affecting at least 7% of all school chil-

dren. Family and twin studies demonstrate that heredity make a substantial contribution to disease risk. Towards determining the role of specific genes in this complex disorder, we have undertaken a series of family based studies based on DNA samples obtained from both parents and probands. A number of common polymorphisms including the dopamine receptor D4, the serotonin transporter, catechol-o-methyltransferase, monoamine oxidase and SNAP 25 have been genotyped. In addition to examining preferential allelic transmission to the affected proband, we have also examined the role of these polymorphisms on a neuropsychological test, the TOVA, that assesses both attention and impulsivity in these children. The results from our studies will be discussed as well as their implications for understanding the biological basis of this complex disorder.

S33.02

Attention-Deficit/Hyperactivity Disorder (ADHD) in adults or cluster B - personality disorder?

J.J.S. Kooij*. *Parnassia, Psycho-Medisch Centrum, The Hague, The Netherlands*

ADHD is no longer just an important psychiatric disorder of childhood, as lifetime persistent symptoms and impairment of this disorder are more and more recognised in adults as well. ADHD in children as well as adults is frequently comorbid with depression, anxiety disorders, substance use disorders and conduct- or personality disorders. In this study ADHD was diagnosed using a semi-structured interview on ADHD-symptoms and comorbidity. Information was gathered from the patient, the partner (current symptoms and impairment) and family members (childhood symptoms and impairment). Personality disorders were investigated using the semi-structured DSM-IV based, International Personality Disorder Examination (IPDE) interview. We hypothesised that symptoms like mood swings, anger-outbursts and impulsivity in ADHD patients could be responsible for symptom overlap with cluster B personality disorders and diagnostic confusion. First data from this invent arising study on symptom overlap between ADHD and borderline and antisocial personality disorder criteria according to DSM-IV, in 54 adults with ADHD will be presented.

S33.03

Cognitive endophenotype of ADHD

J.K. Buitelaar*. *Department of Psychiatry, UMC St. Radboud, Nijmegen, The Netherlands*

Adoption and twin studies indicate that ADHD is highly influenced by genetic factors, with heritability ranging from 0.6 to 0.9. One of the greatest challenges in studying the genetic basis of psychiatric disorders is to find appropriate ways to define the relevant phenotype. Endophenotypes are latent traits that carry genetic loading and are related indirectly to the clinical symptoms as defined in DSM-IV. The aim of this study was to uncover cognitive endophenotypes of ADHD. Performance on a selection of well-known tasks measuring different aspects of executive functioning, i.e. response inhibition, fine motor functioning, attentional control, and mental flexibility, was examined in a family-genetic study design with 25 carefully phenotyped ADHD probands with a family history of ADHD, their non-affected siblings (n = 25), and 48 normal controls. The controls were matched with the non-affected sibling group for age, IQ, and sex (age ranged from 6 to 17 years in all groups). Striking findings

included that the non-affected siblings had a deficient response inhibition and a weak motor control for complex movements similar to that of the ADHD probands. In conclusion, the findings suggest that deficient response inhibition and higher-order controlled motor deficits in ADHD may be influenced by genetic factors.

S33.04

Inhibitory control and error monitoring in ADHD: Genes, brain activity and environmental effects

R. Schachar*. *The Hospital for Sick Children, University of Toronto, ON, Canada*

Inhibitory control and error monitoring are important to the regulation of behavior in uncertain and changing environments. Inhibition is involved in withholding of a response or the retraction of a response that is in the process of being executed. Error monitoring involves the identification and correction of mistakes in performance. Deficits in these processes are evident in poorly controlled and impulsive behavior. Recent research shows both inhibition and error monitoring deficits in ADHD. Deficient inhibition delineates a subtype of ADHD that is particularly heritable, and deficits are shared by unaffected siblings. We have observed linkage of inhibition to risk alleles for ADHD. fMRI studies clarify the role of prefrontal executive control processes in inhibitory control. These results along with an agenda for future research will be presented. Keywords: cognition, genetics, attention deficit disorder.

S33.05

Therapy for Attention Deficit Hyperactivity Disorder in adults

D. Ryffel-Rawak*. *Psychiatrie/Psychotherapie FMH, Bremgarten bei Bern, Switzerland*

Attention Deficit Hyperactivity Disorder (ADHD) is, with a prevalence of 5%, one of the most diagnosed disorders in childhood and adolescence. As many as two-thirds of ADHD children still have impairing symptoms as adults: Inattention, hyperactivity and impulsivity being the key symptoms. Furthermore, adults with ADHD often suffer from comorbid conditions as Depressive, Bipolar, Anxiety or Conduct Disorders. Misdiagnosed conditions, years of ineffective treatment can lead to dramatic consequences: Low self-esteem due to adverse academic and vocational outcomes, underemployment and inefficiency. The more seriously affected develop substance abuse problems or engage in criminal activities. ADHD is a lifelong condition; recognition, diagnosis and treatment is possible and available and should be promoted. The therapy for ADHD adults is multimodal and based on Pharmacotherapy, Psychotherapy and Coaching. Prior to therapy a personalized information on ADHD is imperative. The targets of the pharmacotherapy are the core symptoms of ADHD as well as the pattern of comorbid disorders. The basic medication of ADHD are stimulants. 70-80% of all adult ADHD patients can benefit from a correctly carried out stimulant therapy. Coexisting comorbid disorders should be handled first, it may well be necessary to combine different drugs, the new antidepressants being most helpful. ADHD adults require a comprehensive treatment given the history of failures from a chronic disorder. Parallel to pharmacotherapy structured cognitive based therapies are helpful. Once the patient is stabilized, coaching should take place in order to foster the self-regulating process encouraging and supporting the patient in developing and maintaining adaptive strengths and coping skills.

S41. Symposium: What Kind of Patients in a Rapidly Changing World?

Chairpersons: Alain Lazartigues (Bohars, France), Julian Leff (London, UK)

16:15 – 17:45, Hall D

S41.01

Cultural influences on psychopathology in the light of migratory movements in Europe

J. Leff*. *Director, MRC Social and Community Psychiatry Unit, Institute of Psychiatry, London, UK*

No abstract received.

S41.02

Psychopathology - 15 years after the fall of the Berlin Wall

M. Hrdlicka*. *Department of Child Psychiatry, Charles University, 2nd Medical School, Prague, Czech Republic*

Shortly after the fall of the Berlin Wall, another historical wall broke down - the traditional wall of the European psychopathology based strongly on the old concept created by Emil Kraepelin. With the worldwide acceptance of the International Classification of Diseases, 10th Revision (ICD-10) in the beginning of the 1990's, major changes occurred in the psychiatric concepts and diagnostics. The majority of them had positive consequences. The new operational way of thinking has strengthened the scientific power of psychiatric diagnoses, and facilitated the international research co-operation. The introduction of new diagnoses as in cases of panic disorder, hyperkinetic disorders, or pervasive developmental disorders has improved our diagnostic knowledge and specificity in the field of psychiatry. New concept of depression which cancelled the dichotomy between endogenous and psychogenic depression has contributed to clearer and better treatment algorithms. On the other hand, some simplifications in ICD-10 could be seen as loss of the detailed psychopathological distinction. Nevertheless, this process of simplification has not been associated with decreased interest in psychopathology. The relative proportion of psychopathological references to the total number of references in psychiatry remains stable (19,9% in 2000 versus 19,4% in 1990).

S41.03

New couple, new family, new children, new pathology

A. Lazartigues*. *Centre Hospitalier Universitaire de Brest, France*

In the three last decades, the family and the couple have profoundly changed. The couple is becoming insecure, no more long lasting and a private link based on love and sexual attractions has replaced the marriage and his institutional acknowledgment. In the family, authority and the sense of duty as a value have vanished. Parenthood is more and more built on consensual relationship, with hedonism as the main value in the family. This new frame of education and this new environmental background yield new children with psychiatric pathology centered on behavioral disorders and aggressiveness, intolerance to frustration and inability to cope with delay, great dependency toward external objects and sexual behaviour not very socialised, absence of

guilt and poor imagination. We proposed the hypothesis that this new social and familial environment produces new basic personality, no more neurotic, but narcissistic and dependent.

Keywords: family - parenthood - conjugality - basic personality - narcissism

S41.04

Mass media et fonctionnements nouveaux de nos personnalités

J.-Y. Hayez*. *Université Catholique de Louvain, Belgium*

Je prendrai pour application les jeunes et leur usage souvent intense d'Internet, des jeux électroniques et de tant d'autres multimédia. Des transformations de leur fonctionnement social, voire de leur personnalité y semblent liées. Difficile cependant d'affirmer avec certitude où est la cause et où est l'effet: on est probablement face à une version contemporaine de l'histoire de la poule et de l'œuf. Certaines de ces transformations signent probablement la lente mouvance de l'aventure humaine et ne devraient pas être accueillies de façon péjorative. Evoquons ici par exemple: -d'autres processus de construction du savoir, peu liés à la transmission intergénérationnelle; -l'assomption d'une identité davantage mosaïque, où des composantes minoritaires, souvent archaïques, sont intégrées comme « naturelles »; -des transformations des vécus et des pratiques sexuels, avec un grand chambardement du concept de perversion; -un investissement très prononcé de la communication, qui se démarque de la culture de la solitude née de notre génération, avec des phénomènes nouveaux comme la solidarité dans l'anonymat ou le nomadisme des passions médiatées. Inversement, il se fabrique aussi du clairement pathologique: un affaiblissement continué de la référence aux Lois, lié entre autres aux pratiques transgressives des grands nombres; la mise en place de vécus de toute-puissance parfaitement stériles ou encore le déplacement des dépendances (addictions) vers des objets technologiques.

S41.05

The educational patterns and the psychological instances

E. Lemonnier*. *Centre Hospitalier Universitaire de Brest, France*

In the fifties Annah Arendt and Margaret Mead with others, brilliantly described the evolution of education princips. Today these changes are evident in our European countries. From a position of authority, we switched to a mode of mutual understanding. The difference between generations have softened. Hedonism has overcome duty. The picture with it's instant power substitute for the print, more propicious to thought. The psychic consequences are try no means minor and affect flow of time as well as inventiveness. Thus, we shall see how ego, superego and id are modified affording lights on some psychopathology of everyday.

W11. Workshop: Particularites Neurobiologiques, Pharmacologiques et Developpementales de l'addiction chez l'adolescent et le jeune adulte

Chairpersons: Olivier Halfon (Lausanne, Switzerland), Manuel Bouvard (Bordeaux, France)
16:15 – 17:45, Hall E

W11

'Particularités neurobiologiques, pharmacologiques et développementales de l'addiction chez l'adolescent et le jeune adulte'

M. Bolognini¹, B. Boutrel², B. Broers³, J.-R. Cardinaux¹, M. Corcos⁴, O. Halfon¹. ¹*Service Universitaire de Psychiatrie de l'Enfant et de l'Adolescent, Lausanne, Switzerland.* ²*Department of Neuropsychopharmacology, La Jolla, CA, USA.* ³*Département de Médecine Communautaire, Geneva, Switzerland.* ⁴*Institut Mutualiste Montsouris, Paris, France*

En Suisse, les problèmes d'addiction ont connu des fluctuations avec une diversification des produits consommés et une précocité du début de la consommation. Cette problématique nécessite d'être appréhendée sous des angles différents: Olivier Halfon présentera des données récentes sur les neurosciences de l'addiction, montrant que certaines substances exercent un effet renforçateur en activant artificiellement le système mésolimbique dopaminergique, et que l'usage chronique de drogues induit des adaptations à l'origine de la formation des mécanismes de dépendance. Jean-René Cardinaux abordera les facteurs de transcription impliqués dans l'addiction. Les drogues altèrent le niveau d'expression des gènes dans les neurones de la voie mésolimbique. Ces modifications conduisent, à des phénomènes d'adaptation compensatoires liés à la stimulation excessive des récepteurs dopaminergiques. Benjamin Boutrel donnera un exemple de l'utilité des modèles animaux, principalement des rats et souris, pour l'étude des mécanismes de l'addiction. Des tests d'auto-administration de drogues permettent de mesurer la motivation de l'animal à consommer de la drogue, et ainsi de quantifier l'effet de certains facteurs sur cette consommation. Monique Bolognini abordera, sur la base d'une étude longitudinale, les facteurs prédictifs psycho-sociaux et environnementaux de l'aggravation/diminution de la consommation de substances à l'adolescence. Barbara Broers traitera la relation entre drogues et immunité à partir d'une revue sur l'influence des différentes substances psycho-actives. Elle présentera les résultats d'une étude clinique sur l'état immunitaire des patients traités à la diacétylmorphine. Maurice Corcos évoquera les principales conceptions psychopathologiques actuelles proposées dans l'étiopathogénie des troubles de la dépendance.

S75. Symposium: WHO Perspectives in Psychiatry of the Elderly in Europe (Organised by the AEP Section of Geronto-Psychiatry in Collaboration with WHO)

Chairpersons: Carlos Augusto De Mendonça Lima (Lausanne, Switzerland), Wolfgang Rutz (Copenhagen, Denmark)
16:15 – 17:45, Hall F

S75.01

Impact of aging of the European population on the distribution of mental health problems

W. Rutz*. *WHO-EURO, Copenhagen, Denmark*

Age and gender distributions within the populations of WHO European Member States show huge diversities. Implications on the

quality of mental health and the quantity of mental health problems will be highlighted - with specific consideration given to avoidable mortality and excessive morbidity related to cerebral and cerebrovascular disorders as well as to depressive conditions, on addiction, self-destructive behaviour and lifestyles.

S75.02

Mental health problems in the elderly: European perspectives

J.M. Bertolote*. *World Health Organization, Geneva, Switzerland*

The region Europe for WHO is constituted by 52 countries with different cultures, languages, spiritual beliefs and also with different levels of development and organization of care. Demography profiles of all these countries are also quite different: the percentage of old persons is higher at the west and north regions of the continent as result of a long process of population ageing, but the speed of this process is now higher in the east part of the continent. UN previsions for 2025 is that the majority of countries of the region will have more than 15% of their population aged 65 years old and more. As consequence of all these factors the number of old persons with mental disorders risks to increase, as well the distribution of mental disorders risks to change in this population. Countries have to face to these perspectives: if the most developed countries of the region have now policies, programmes and facilities to face to these mental problems, there is no specific organization in the other countries. WHO promotes such developments and has contributed with the elaboration of consensus statements and technical documents useful for all to support the development of the care for old persons with mental disorders. The WHO Mental Health Global Action Programme proposes 4 strategies to improve the general mental health: to create information for better decisions, to promote integrated policy and service development, to develop advocacy against stigma and discrimination, and to enhance the research capacity. All these strategies can contribute to promote mental health in old age in Europe.

S75.03

Screening and treatment of dementia in Eastern Europe

C.O. Tudose*. *Medicine University Carol Davila, Bucharest, Romania*

The interest in dementia in Eastern countries is relatively new, that is lasting since the last decade, being a hidden problem in the previous communist countries. But a lot of new initiatives and progresses have been registered in Eastern Europe, due to the increasing interest in psychiatry for old age, both on behalf of the professionals and the general public, generated by the real problems of the growing elderly population. The paper is making a review of the newest achievements, beginning with a better and specialized education in the medical field (in some countries as Romania being a structured and well organized system of education with the official recognition of the specialty) and the reaction of the civil societies setting up Alzheimer Organizations in many Eastern European countries until the description of specific services for diagnosis and treatment of dementia that are available in this area of the world. The paper is describing the actual possibilities for making an early and accurate diagnosis of dementia, the screening procedures and the therapeutical strategies applied in the countries from Eastern Europe.

S75.04

Organisation of mental health care for old persons in Poland

A. Kiejna*, J. Rymaszewska, T.P. Hadrys. *Department of Psychiatry, Wroclaw Medical University, Faculty of Postgraduate Medical Training, Wroclaw, Poland*

Background: Nowadays many highly developed societies are steadily aging and the same problem is also arising in Poland. Number of old people with impaired cognition and mental disturbances is, therefore, growing forcing mental health care systems in those countries to adapt to the new requirements and needs. Is this that obvious in Poland?

Aim: To give a concise report of organizational structure of mental health cares for old ones in Poland.

Method: This report was prepared on the basis of a self-designed questionnaire sent around to and then collected from Polish psychogeriatric services identified through extensive internet search of Polish Registers of mental health care providers. Additionally, statistical data were obtained from official Polish statistical resources and published results of National Population and Housing Census performed in 2002.

Results: In Poland there are only 4 registered day hospitals serving to the elderly and 2 Alzheimer's Centers. Number of places offered is low, in average 15 places per institution. There are 15 psychogeriatric closed wards with 486 beds in total. Median length of stay in there is 48,8 ranging from 32 to 264,8 days. Some places are also offered in caring units for chronically ill but no official data are available. Number of purely psychogeriatric outpatient clinics is very low and no reliable data exist, main psychogeriatric problems are dealt with in general psychiatric outpatient services.

Conclusions: Poland is underestimating psychogeriatry. Despite there are no objective obstacles on the part of National Health Fund, psychogeriatric services are still not widely offered.

S75.05

Education of psychiatry of the elderly in Europe

C.A. De Mendonça Lima*. *WHO Collaborating Center for Psychiatry of the Elderly, SUPAA, Lausanne, Switzerland*

Psychiatry of the Elderly is a young discipline. It was developed these last 40 years in European countries with high percentage of old people, with an important sensibility to the mental health problems of old persons and with enough resources to develop programs and facilities to care these persons. The discipline has reached a good level of recognition and professionals have organized themselves around national and international associations with high scientific level. Unfortunately the number of professionals working in this field is still very low to completely satisfy the needs of care of these old persons with mental disorders. WHO and WPA published in 1998 a consensus statement on Education of the elderly which settled the basis of educational programs in the discipline (1). This statement was recently completed by another consensus document on skill-based objectives for training in psychiatry of the elderly produced in a meeting including representatives of AEP (2). These documents intend to promote the education and training of professionals in the discipline. Few countries in Europe have recognized psychiatry of the elderly as a sub-specialty: the development of educational programs, mainly at post-graduate level could be an important argument in favour this recognition. Some universities are already proposing post-graduate education but this effort is still very insufficient. Maybe the association of resources of different countries with similar problems and culture could improve this effort.

Références

- [1] WHO & WPA. Education in Psychiatry of the Elderly: a technical consensus statement. WHO/MNH/MND/98.4. WHO, Geneva, 1998.
- [2] Gustafson L, Burns A, Katona C et al. International Journal of Geriatric Psychiatry 2003;18:686–93.

S87. Symposium: The State of Psychiatric Care in Italy: 25 Years After the 180 Reform Law

Chairperson: Michele Tansella (Verona, Italy)
16:15 – 17:45, Hall G

S87

Inpatient care in Italy: A national survey

G. de Girolamo^{1,4}, B. Norcio², R. Bracco², A. Picardi³, G. Santone⁴.
¹Department of Mental Health, Bologna. ²Department of Mental Health, Trieste. ³Laboratory of Epidemiology, National Institute of Health, Rome. ⁴Psychiatric Clinic, Umberto I Hospital and University of Marche, Ancona

Objective: The 'PROGRES-Acute' project is aimed to survey the main characteristics of all Italian psychiatric inpatient facilities, both public and private (Phase 1), and to assess in detail a representative sample of facilities and inpatients (Phase 2).

Method: In Phase 1 structured interviews were conducted with the chiefs of all Italian psychiatric inpatient facilities. Moreover, on May 8, 2003 a census of all inpatients was carried out to identify their main sociodemographic and clinical characteristics.

Results: On October 31, 2003 in 19 regions involved in the survey (out of 21), there were 267 General Hospital Psychiatric Wards, with a total of 3,405 beds (12,7 beds on average for each facility). There were also 49 private inpatient facilities, with 3,838 beds (78,5 beds on average for each private facility). Average stay is much longer in private than in public inpatient facilities, and they serve populations with different clinical characteristics.

Conclusions: In Italy about half of inpatient beds are in private facilities; the care of patients admitted to these facilities is completely covered by the National Health Service. The different aims and characteristics of public versus private inpatient facilities need to be better defined and the integration of private facilities within the local Departments of Mental Health has to be strengthened.

S30. Symposium: Ethical Challenges for Psychiatry in Europe

Chairpersons: Paul Cosyns (Antwerp, Belgium),
Driss Moussaoui (Casablanca, Morocco)
16:15 – 17:45, Hall H

S30.01

Is there a future for psychiatry without progress in ethics?

D. Moussaoui*. *Psychiatric Center, Ibn Rushd University, Casablanca, Morocco*

More than any other medical speciality, psychiatry was confronted in the past to a number of ethical challenges. In mid-XXth century, two tragedies occurred in our professional field: the nazi direct and indirect extermination of mental patients in Europe, and the political abuse of psychiatry in the Soviet Union. Despite the progress made in psychiatry during the past decades, many ethical challenges are still endangering the image of psychiatry and psychiatrists in the world:

- The accusations of political abuse in China towards the Falun Gong, unless rapidly cleared;
- The managed care systems which hamper equity in the treatment of mental patients in many industrialized countries;
- Allocated resources to psychiatry and mental health in developing countries, which are far behind the minimum required for the treatment of patients;
- Abandoned mental patients in difficult situations: prisoners, homeless;
- Stigma against the most severely ill among mental patients;
- Neglected fields such as child and geriatric psychiatry.

There is an urgent need of working with the post-graduates and with the psychiatrists (continuing professional development) on ethical issues addressing of course the daily work with the patients, but also more general issues which have an indirect impact on psychiatry and psychiatrists. Education and research in ethics in psychiatry, advocating and setting partnership with all those concerned, especially the users and their families, are essential for a substantial progress of psychiatry in the coming decades.

S30.02

Confidentiality in psychiatry, the challenges for the future

J.J. López-Ibor*. *Clinica López Ibor, Madrid, Spain*

Abstract not received.

S30.03

Coerced treatment in psychiatry: The challenges for the future

P. Cosyns*. *Professor of Psychiatry, University of Antwerp, Belgium*

According to the declaration of Madrid (WPA 1996, revised 2002) no treatment should be provided against the patient's will, unless withholding treatment would endanger the life of the patient and/or those who surround him or her. It stipulates also that treatment must always be in the best interest of the patient. We view coercion not in terms of presence or absence but in terms of degree and source, along a continuum between voluntary and forced treatments. Mental health care shifts from the hospital to the community, and we witness a growing trend toward outpatient commitment orders (relapse prevention of sexual or drug abusers, compliance of schizophrenic patients with their medication...). A forced treatment situation can be morally justified when the initial coercion lead to a greater freedom and restores (or maintains?) the capacity of the patient to exercise proper judgment. The boundaries between psychiatry and the law will be explored: psychiatrists act always in the best interest of their patients and not primarily for the safety of society. The problem of confidentiality of health care information in judicial coerced treatment will be discussed. Clinical and ethical guidelines on the use of coercion in psychiatric treatment will be proposed: the criterion of dangerousness linked to a psychiatric disorder, lack of treatment will be detrimental, use of the least restrictive alternative to restore or maintain the competence of the patient, safeguard of the human dignity and the legal rights of the patient.

S30.04

Impact of human rights law in the field of mental health

G. Niveau*. *Institut de Medecine Legale, Geneva, Switzerland*

Abstract not received.

Free Communications: Psychotherapy

16:15 – 17:45, Hall I

Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse

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Recent data suggests that depression is set to become one of the Western world's largest burdens of ill-health over the next twenty years. Much of this high rate of depression is due to the high risk of relapse and recurrence in those who have been depressed before. Recurrence occurs when small shifts in negative mood retrigger old habits of negative thinking formed during previous episodes. Mindfulness-based cognitive therapy (MBCT) combines Jon Kabat Zinn's Stress Reduction program with techniques from Cognitive Therapy in an eight week 'class' format for up to twelve patients who are currently in remission. It aims to teach participants how to become aware of early warning signs of relapse, and to reduce tendencies to avoid these early signs. It includes breathing meditation and yoga stretches to help participants become more aware of moment-to-moment changes in the mind and the body. It also includes basic education about depression, and exercises from cognitive therapy that emphasise the links between thinking and feeling. Preliminary evidence suggests that it significantly reduces risk of relapse and recurrence in patients with three or more previous episodes of major depression.

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Essentials of the IS-TDP (Intensive Short-Term Dynamic Psychotherapy) compared to psychoanalysis and cognitive therapy

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IS-TDP as a genuine psychoanalytic method consequently is concentrating on three tasks: Overcoming the pathological forces of resistance - integration of unconscious impulse, affect and feeling - managing the expansion of the transference. The last-mentioned factor with its power of seduction is the nuclear fuel of the analytic process. That's just why a rapid and direct Unlocking of the Unconscious in the

service of structural changes in patients with psychoneurotic, functional, psychosomatic and borderline symptoms has become specific for IS-TDP. Pursuing the same goal as classical psychoanalysis IS-TDP differs in applying an individualized but systematic and active pressure technique to release repressed unconscious memories. A repeated periodical rise of highly condensed and mixed transference feelings inhibits the development of the transference neurosis and fosters the passage of the buried feelings like aggression, guilt and love related to figures of the past. Enabling continuously such 'break-throughs' is shortening and putting new life into the process even without a prefixed time limitation. As a result the therapists interpretation is freed from bias due to the evidence of inner findings of the patient himself. Whereas the issues of memory and learning in cognitive therapy are establishing priorities, in IS-TDP they are in fact central too but always in connection with preceding emotional experiences. In IS-TDP the steps of analysis and working through personal data rooted in the Unconscious are equivalent to processes leading to learning and cognitive insight.

Specificity of psychodynamically oriented group therapy in eating disorders

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Introduction: If, in a psychodynamic key, an altered eating behaviour represents an evident, but related to a deeply rooted mental illness, symptomatological aspect, the elaboration of the bond between symptoms and the conflictual dynamics lying below seems the necessary condition to develop a psychophysical well-being which, as an idea of recovery, goes beyond the simple absence of symptoms. Furthermore, the group setting, as emerges from several clinical experiences and from some literature, represents a space particularly fit for the elaboration of the typical mental dynamics linked to this disease.

Methods: We analyzed the path in relation to 2 therapeutic monosymptomatic groups, taking place within the therapeutic project developed for patients with eating disorders at the University Psychiatric Department of the 'Umberto I' Hospital in Ancona. The groups are homogeneous about disease, open and psychodynamically oriented.

Conclusions: We found, through this analysis, that the specificity of the psychodynamically oriented group therapy is linked to precise characteristics of the eating disorder. Mainly, the eating disorder is a problem of binding, invasion and addiction: the group allows to experience at the same time non-destroying fusion, as belonging to the group and the autonomy and the individualization through the valorization of the individualities of each member of the group. In relation to the mental devices of scission and denial, extremely used by these patients, there's the chance to project the divided parts of oneself emerging more rapidly than in an individual setting, in particular the sick and 'denied' part.

Integrated Psychological Therapy (IPT) for schizophrenia patients in different settings, patient sub samples and site conditions: A meta-analysis

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Over the past 23 years, research groups in Europe, North-America and Asia have conducted 27 independent evaluation studies on IPT includ-

ing 1306 patients. The present study examines the effectiveness of IPT under different conditions by means of a meta-analytic review. The most salient results indicate favourable mean effects for IPT in comparison to placebo-attention conditions and standard care alone. Moreover, the superiority of IPT continues to increase during an average catamnestic phase of 8.1 months. IPT obtains similar favourable effects in different functional areas (neurocognition, social behaviour, psychopathology) as well as in different assessment formats (expert ratings, self-reports, psychological tests). Furthermore, improvements in neurocognitive functioning correlate significantly with symptom reduction. Outcome predictors such as the duration of illness could be identified. The comparison of different settings of IPT and control groups shows the superiority of IPT in any given therapy or site condition. However, a minimal therapy intensity of two sessions a week appears to generate additional benefits. The analysis of patient sub samples of inpatients, outpatients and patients in varying rehabilitation phases, reveals similar favourable effects. Selecting only high quality studies using Randomized Controlled Trials (RCT) and blind-rating standards yields comparable results. In summary, the present meta-analysis corroborates evidence of IPT as an 'empirically validated treatment' according to APA guidelines. Further studies of IPT should ideally focus on differential indication and recent research results with regard to social cognition and cognitive remediation approaches.

The crisis intervention in a psychiatric emergency unit decreases the number of voluntary hospitalizations in psychiatry

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The aim of this study was to investigate the impact of crisis intervention in psychiatric emergencies on the number of hospitalizations and the number of outpatient visits during follow-up. We compared the number of psychiatric interventions and the number of hospitalizations before and after the introduction of the concept of crisis intervention in a psychiatric emergency unit - currently in development, at the Hospital Center of Luxembourg. Data were collected retrospectively to compare patients examined in the psychiatric emergency unit during six months, from 01/09/2001 to 28/02/2002, with patients that were able to benefit from a crisis intervention from 01/09/2002 to 28/02/2003. The results show a statistically significant decrease of voluntary hospitalizations and a significant increase of the number of patients with more than five outpatient consultations, after the introduction of crisis interven-

tions. The decrease in the rate of hospitalizations was most important for patients presenting an underlying personality disorder ($p < 0.001$). Crisis intervention was more efficient in women. This finding may have been influenced by methodological difficulties and should be further assessed in additional studies. An estimation of the costs arising from hospitalization highlights the economic importance of crisis intervention. The results of the study are in agreement with other studies and emphasize the importance of crisis interventions in psychiatry for improving the management of patients seen in emergency settings, especially of patients presenting a personality disorder.

Keywords: psychiatric emergency; crisis intervention; voluntary hospitalization; ambulatory follow-up; personality disorder.

ADHD in children and family relations during treatment

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Children with externalizing behavior like ADHD (Attention Deficit Hyperactivity Disorder) can be seen as a good study example for the involvement of the family context in development. In a specialized clinic for the behavioral and cognitive treatment of young ADHD patients and their parents we investigated the family relations using the Family-Identification-Test (FIT, Remschmidt & Mattejat, 1999) and the Family-System-Test (FAST, Gehring, 1998). With the FIT one can describe different self-concepts (real, ideal ...) and concepts of significant others (parents, siblings ...) by sorting 12 cards with attributes derived from common personality dimensions (e.g. intro-/extraversion ...). The similarities between these concepts indicate identification patterns (i.e. 'I am like my mother', 'I want to be like my father' ...). The FAST, in the tradition of sculpture techniques, consists of wooden figures which symbolize the family members and allow analysis of the two basic dimensions of cohesion and power/hierarchy in family relations. The treatment process is sequentially structured: the patient and a family member enter the clinic three times for a one/two week period during 18 months. Each time the family assessment were applied with the child and at least one parent. Thus, from a sample of families (N=46) longitudinal data are available. The results demonstrate significant changes in some family variables which indicate improvement. The study demonstrates that family assessment procedures are able to reflect dynamic changes during treatment and can be useful in clinical practice with children and their families.