# PSYCHIATRIA DANUBINA

*2007 • supplement 1 • volume 19*

*Proceedings from*

## Cambridge / Luton International Conference on Mental Health 2007

*11th-13th October 2007*

Churchill College
University of Cambridge
UK

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Psychiatria Danubina (ISSN 03535053) is published quarterly by Medicinska naklada, Cankarova 13, 10000 Zagreb, Croatia.

The cost of a yearly subscription to the journal is € 75.00 for institutions, and € 50.00 for individual subscribers. (Payments in other currencies will be accepted on the basis of the official currency exchange rates). Subscriptions will be automatically renewed and the subscribes charged for it for a further period of one year, unless notification of cancellation is received by the 1st December. Advertising enquiries, correspondence and copy requests should be addressed to Dr. Miro Jakovljević, Psychiatric University Clinic, KBC Zagreb, Kišpatićeva 12, HR-10000 Zagreb, Croatia (tel: +385 1 23-88-593; tel/fax: +385 1 23-88-329, +385 1 23-47-916).

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On the behalf of the Danube Psychiatric Association.



Printed in Croatia.

The publication of this journal is financially supported by the Ministry of Science, Education and Sport of the Republic of Croatia.

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Bedfordshire and Luton NHS
Mental Health and Social Care Partnership NHS Trust

# BCMHR-CU

***Bedfordshire Centre for Mental Health Research in association with University of Cambridge***

# Cambridge / Luton International Conference on Mental Health 2007

*11th-13th October 2007*

**Churchill College, University of Cambridge, UK**

# Welcome note

Welcome to the Cambridge/Luton International Conference on Mental Health 2007. This is the seventh in the series.

The series had begun in Luton to raise the profile of Mental Health Services locally and to promote the modernisation of Mental Health Services in our region, and has now grown into an event which brings together many networks which work together across Europe.

The aim has become one of fostering international collaboration about mental health in Europe at level of research, education and service development.

As a consequence, various networks have joined together to deliver this conference. Our own centre, the 'Bedfordshire Centre for Mental Health Research in collaboration with the University of Cambridge' (BCMHR-CU) organises the conference. It is a centre which, together with the Department of Psychiatry of Cambridge University, has over the past few years worked in close collaboration with many colleagues from Eastern Europe, and the results of that collaboration, in terms of research and service development, will be seen in some of the posters on display.

Another network which links with us for this conference is the Group of Croatian and Slovenian Doctors, ably led by Ivan Urlic and Sladana Ivesic, who meet annually at the International School for the Psychotherapy of Psychosis in Dubrovnik. Sanja Martic Biocina had brought these two groups together. She had been the first person from outside the NHS to address one of our conferences. The result has been much joint work with her hospital in Zagreb, and also a whole program of work on prodromal psychosis in Ljubljana, the results of which will be presented in the conference by their authors, Marjeta Blinc and Brigita Novak.

Over the last few years, our key focus has been on the development of psychotic illness, but a third network joins us for the first time; the 'Centro Studi Psychiatrici', from Italy, with its leader, Giuseppe Tavormina, and this group brings with it a new focus on Bipolar Disorder. This focus moves beyond Europe, with the collaboration of Hagtrop Akiskal, Zoltan Rhimer, and Martha Sajatovic, all of whom are linked with this group. We can discuss what we can do to begin to identify and treat Bipolar illness earlier, and increase our understanding of the bipolar spectrum of disorders.

Indeed the special lecture given by Emeritus Prof Paykel is the highlight of third day.

Ongoing links of BCMHR-CU with the Department of Psychiatry at the University of Kosice bring us our colleagues Eva Palova and Cyril Hoschl (President of the European Association of Psychiatrists).

We are in the process of publishing the results of the Luton Early Intervention Service, and welcome the opportunity to compare them with the work of Rosenbaum and Nordentoft. Our knowledge in neuroimaging of first episode psychosis will be increased by the contributions of Christos Pantelis.

Apart from Peter Jones's talk on new epidemiology of psychosis, new tools for epidemiological studies will be suggested by group from Malta.

Cutting edge technologies being used in Psychiatric research will be the focus of talks by Martic Biocina, Bahn, Herberth and Zaman.

There are also some useful talks about the Genetics of Psychosis (Stefanis, Alptekin and Pregeli). A developing research interest in Psychosis and Trauma brings Kozaric Kovacic and Pivac, with their huge experience of psycho-trauma during the war in Croatia. We also have useful talks on medications and service issues particularly in the NHS.

Lastly, an important feature of the conference this year is the huge interest expressed by junior Doctors and medical students from across the UK. These young colleagues are participating actively, with a fair number of posters. This is something we are keen to encourage in this hopefully a very interactive conference. We are particularly thankful to Samir Shah and Roshelle Ramkisson who have encouraged so many young colleagues to participate.

***Mark Agius***
***Peter Jones***
***Rashid Zaman***

# TALKS

## T1

### THE EMERGENCE OF THE BIPOLAR SPECTRUM: EVALUATING THE RESEARCH EVIDENCE

***Hagop Akiskal***
*University of California at San Diego, La Jolla (USA)*

"Bipolar spectrum" first appeared in the psychiatric literature in a 1977 paper on a prospective follow-up of cyclothymic individuals: Most developed depression or bipolar II, fewer developed full blown manic-depressive illness and, significantly, nearly half the sample treated with antidepressants developed increased cycling. Subthreshold bipolar conditions have been identified in the community and several epidemiological studies and follow-up have revealed progression to "soft" and even full blown bipolar disorders. There has been great momentum in the clinical literature to study the various forms of the bipolar spectrum, which in addition to the well-known types I and II in the DMS-IV and ICD-10 language, include depressions with shorter hypomanias, hypomanias elicited by antidepressant treatment, depressions arising from various bipolar temperaments such as the cyclothymic and the hyperthymic, as well as depressions with inter-episodic hypomania (depressive mixed state). Despite criticism from some quarters, bipolar validation has been achieved for most of these in rigorously conducted studies coming from various clinics in the world, particularly the United States, Italy, France and Hungary, as well as two national studies from Poland and France. Other proposed bipolar concepts refer to issues that have to do with "unipolar" depressions with high recurrence, atypicality, seasonality, age at onset, depression with bipolar family history, and affective states occurring in the setting of multiple anxiety disorders, as well as those in the postpartum period. In addition, there is the controversial proposal that poly-substance abuse, particularly cocaine and stimulant, might be related to the bipolar spectrum. This is a large terrain and beyond the conventional literature but of major significance for public health, clinical psychiatry, psychiatric theory and research methodology, including genetics. Thus, the field has progressed to the point of proposing some "soft" bipolar conditions as behavioural endophenotypes for bipolar disorder; even genes have been identified in preliminary studies. While uncritical acceptance of a broad spectrum is not justified, criticisms of the bipolar spectrum without adequate familiarity of the entire literature are equally unwarranted.

## T2

### PREDICTION AND PREVENTION OF SUICIDE IN BIPOLAR DISORDERS

***Zoltán Rihmer***
*National Institute for Psychiatry and Neurology, Budapest and*
*Semmelweis Medical University, Budapest, Hungary*

Bipolar disorders are quite prevalent, but frequently under-referred, under-diganosed and under-treated illnesses. The early recognition and appropriate treatment of bipolar disorders is particularly important, since untreated bipolar illness carries extremely high risk of both attempted and committed suicide. Considering the clinically explorable suicide risk factors in bipolar disorders (family and/or personal history of suicidal behaviour, early onset of the disorder, severe depressive episode/hopelessness, agitated/mixed depression, bipolar II diagnosis, comorbid Axis I and Axis II disorders, adverse life situations, lack of social and medical support), in the majority of cases, there is a good chance that suicidal behaviour is predictable. There is also much evidence that long-term treatment of bipolar patients with mood stabilizers (particularly with lithium) substantially reduces the risk of attempted and completed suicide, even in this high-risk population.

# T3

## BIPOLAR SPECTRUM DIAGNOSIS AND SOCIAL ASPECTS OF MOOD DISORDERS: THE EUROPEAN DEPRESSION DAY PROJECT

***Giuseppe Tavormina***
*President of "Psychiatric Studies Centre" (Cen.Stu.Psi.), Provaglio d'Iseo, Italy*

**Background**

Depression and mood disorders are now a major public health problem.

The World Health Organisation recently reported that by the year 2020, depression will be the leading cause of disability world-wide, after cardio-vascular disease.

The importance of premorbid personality and past history is essential in correct diagnosis of Bipolar Mood Disorders (BD), of which depressive episodes are very often only one phase.

There is a public health significance in the correct identification of bipolar disorders: bipolar disorders (including threshold and subthreshold forms of BD II) are much more prevalent than previously believed. BD II (threshold + subthreshold) is the most common clinical manifestation Often bipolar disorders are underreferred, underdiagnosed and undertreated/mistreated. To fail to adequately treat bipolar disorders may have serious complications (suicide, substance-use, work-loss, etc).

**Methods**

The Non-Governmental Organisation "European Depression Association" (EDA), headquartered in Brussels, aims to promote a day dedicated to raising awareness of depression in every European country. This initiative will target Psychiatrists, GPs, other health professionals, patient organisations, and the general public. European Depression Day is designed to make everyone more aware of the importance of prevention, early diagnosis, and optimal treatment.

**Results**

Physician education in depression recognition and treatment and avoiding treatments which carry a potential for death in overdose reduce suicide rates is important in prevention. Other preventive care methods include advising our patients with BD diseases to encourage their respective significant others to undergo a psychiatric evaluation for possible treatable disease: the first objective of this is preventive care, secondarily the well-being of the partner may improve the treatment outcomes for the patient.

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# T4

## TREATMENT ADHERENCE IN INDIVIDUALS WITH BIPOLAR DISORDER (BPD)

***Martha Sajatovic***
*Professor of Psychiatry, Case Western Reserve University School of Medicine (USA)*

There is growing consensus that a major obstacle to good outcome among individuals with bipolar disorder (BPD) is premature discontinuation of medications. This update will summarize the current literature on prevalence and consequences of non-adherence in BPD populations, measurement of adherence, risk factors for non-adherence, general and psycho-educational interventions to enhance treatment adherence among bipolar populations, and suggests future directions in approaches with respect to treatment adherence enhancement. Risks associated with discontinuation of medication among individuals with BPD are well documented and include manic and depressive relapse, re-hospitalization and more lengthy hospital stays. A relatively limited, but growing literature suggests that it is possible to

enhance treatment adherence among patients with BPD. The most positive evidence for the improvement of medication adherence among patients with BPD comes from specific psychosocial interventions used in conjunction with pharmacotherapies. It has been suggested that improved treatment adherence is at least a partial component of the observed positive outcomes of psychoeducational approaches among bipolar populations. Many individuals with BPD remain relatively uninformed regarding their illness, creating potential barriers to optimal treatment adherence, and limiting self-management skills. A collaborative care model in which individuals are active participants in their own care decisions can potentially optimize choice of interventions intended to improved medication treatment adherence. There is an urgent need for greater understanding of interventions that can be implemented in real-world settings that address patient, provider/system, and environmental/social factors that are critical to treatment adherence.

# T5

## EARLY INTERVENTION IN BIPOLAR DISORDER: A NEW CHALLENGE ON THE HORIZON

***Jesus Perez***

*CAMEO (Early Intervention Service) Cambridgeshire and Peterborough Mental Health NHS Trust, Honorary Fellow Department of Psychiatry, University of Cambridge, UK*

Since the Krapelinian optimistic outcome discourse on manic-depressive insanity[1], research on first-episode bipolar I disorder has been relatively neglected[2]. Nowadays, longitudinal first-episode bipolar disorder studies have revealed less favourable courses than had been historically considered, and are also showing some trails to implement early intervention programs.

The striking uncommon full functional or symptomatic recovery and high risk of relapse, recurrence, switching or suicide/accident during the first two years after a first presentation[3, 4], justify the key principles of early intervention: early detection and rapid, optimal, intensive and sustained intervention [2].

Nevertheless, preventive strategies in bipolar affective psychosis should evolve from current schizophrenia-oriented models, given the socio demographic and clinical/phasic particularities, variety of factors involved in long-term vulnerability and specific outcome predictors. In that framework, the broader range of ages at onset and occupational situation, the ominous long-term implications of initial mixed states or co-morbid substance abuse-anxiety and the predictive value of first-episode polarity on first-recurrence type and overall morbidity, are noteworthy[5]. In fact, course and phasic pattern prediction from the very beginnings could help to clarify the dilemma of bipolar disorder pharmacological treatment choice and provide robust grounds for an optimal medical, social and psycho educational integration.

In short, these and other initial findings emphasize the importance of early case finding and intervention, sensitive to the special needs of a high risk patient group, which include an extraordinary complexity amongst and within subject long-term course/patterns and remarkable functional impairment from very different former occupational status.

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# T6

## METABOLIC EFFECTS OF ANTIPSYCHOTICS

***Cyril Höschl***
*President Association of European Psychiatrists, Prague Psychiatric Centre & Charles University, 3rd Faculty of Medicine, Czech Republic*

Although antipsychotics of the second generation (AP2G) are to a certain degree associated with metabolic risk factors including weight gain and alterations in lipid and glucose metabolism, the disease itself (schizophrenia) may also be associated with an increased risk of diabetes mellitus type 2 in comparison with the general population. Moreover, conventional antipsychotics, especially phenothiazines, were also reported to impair glucose tolerance and to aggravate pre-existing DM. Possible diabetogenic mechanism of AP2G may involve direct influence on pancreatic beta-cells via $5HT_{1A/2A/2C}$ receptors, $alpha_2$ functions or muscarinic M3 receptors as well as weight gain due to H1 and/or 5HT2C antagonism. Other possibilities involve blockade of glucose transporter, increase of leptin etc. Our published data on the relationship between central serotonin turnover and insulin sensitivity will be briefly presented.

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# T7

## EPIDEMIOLOGY OF PSYCHOSIS

***Peter Jones***
*Department of Psychiatry University of Cambridge. UK*

Studying the epidemiology of psychotic syndromes has been an exciting pursuit over the past decade with developments in schizophrenia, the affective psychoses and the relationships between these familiar constructs. Many tenets that linger in the textbooks, such as equal incidence between men and women and lack of geographical variation, have either been disproved or extensively reformulated through new large-scale studies and the systematic review and meta-analysis of existing work. We are left with an interesting and rich epidemiological landscape that leads into the biological (such as developmental biology, genetics and neuropsychological functioning), social science (such as social capital and the interactions between people and places) and clinical arenas, with the enticing prospect of synthesising these approaches within the careers of psychiatrists currently in practice and, more importantly, within the lives of their patients. These new findings will be discussed.

# T8

## CLOZAPINE IN FIRST EPISODE PSYCHOSIS; A LESSON FROM HISTORY

***Eva Pálová, Julia Mullerová, Klara Lošonciová & Jozef Dragašek***
*Ist Dept. of psychiatry Univ. of P.J.Š., Košice, Slovakia*

Introduction: Clozapine, an atypical, dibenzodiazepine antipsychotic, is generally considered to be the most effective antipsychotic drug. In 1960s, in several European countries, clozapine was the only atypical antipsychotic available. As a consequence, it became possible to use clozapine in first episode psychosis.

This is no longer usual practice in the UK and USA because of agranulocytosis being a possible side effect. However, in some European countries, with appropriate precautions, clozapine was used as a first line medication for psychosis.

Patients and Methods: we decided to do a retrospective survey of patients treated at the Ist Dept.of Psychiatry in Košice with the diagnosis F 20 and F 23 during 1996-2006. Out of 7 903 hospitalized patients 754 were treated with the diagnosis of psychotic disorder. In this group of patients we identified 37 patients (17 males and 20 females) with the diagnosis of F 20 and F 23 that were treated with clozapine as the first line medication. All patients taking clozapine did have a baseline complete blood cell count (CBC) including WBC before starting therapy, ECG and physical examination. WBC has been monitored according our Slovak Clozapine Registry. The group was significantly older than the rest of psychotic patients, 27.5 yrs vs. 25.0 yrs ($p<0.001$) and the number of following hospitalizations since the first treatment with clozapine due to psychosis was also significantly lower then in the rest of the group (4,6 vs. 7,8 ).

Conlusion: according to our retrospective survey we may conclude that the group of patient treated from the very beginning with clozapine were doing better then the rest of the patients. But it should be clear that these results carry all the negatives of a retrospective survey. The presentation will examine in much greater detail the outcomes of this treatment in a retrospective manner in order to add to our knowledge of this medication.

# T9

## THE DANISH NATIONAL SCHIZOPHRENIA PROJECT (DNS): A LARGE SCALE PROSPECTIVE INVESTIGATION OF ASPECTS OF PSYCHODYNAMIC AND INTEGRATED TREATMENT.

***Bente Rosenbaum***

*Copenhagen University Denmark, President of the Danish Psychoanalytic Society*
*Ex-president of the Danish Psychiatric Society, Denmark*

The Danish National Schizophrenia project for persons with a first episode psychosis within the schizophrenia spectrum (F20-29) has initially collected data for 562 persons, included consecutively in a 2 years period (1997-1999). The investigation covers 45% of the Danish population. The study has prospectively investigated three types of treatment: psychodynamic psychotherapy, integrated treatment and Treatment as usual.

The presentation will include results from the investigations of: psychopathology and social function; changes of interpersonal self-image in psychotherapy; changes in the neurocognitive test profiles; and the content and outcome of Treatment as usual. Data will encompass inclusion and 2 years follow-up. Preliminary 5 years data will also be indicated.

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# T10

## IMPACT OF EARLY & LATE NEURODEVELOPMENTAL CHANGES ON THE DEVELOPMENT OF PSYCHOSIS

***Pantelis C[1], Velakoulis D[1], Yücel M[1,2], Wood SJ[1], Sun D-Q[1,3], Yung A[2], Phillips L[2], Berger GE[2], Brewer W[2], Proffitt T[2], Henry L[2], O'Brien C[1,2], Harris M[2] & McGorry PD[2]***

*[1]Melbourne Neuropsychiatry Centre, The University of Melbourne, Melbourne Health & National Neuroscience Facility, Australia*
*[2]ORYGEN Research Centre, The University of Melbourne, Australia*
*[3]Clinical Neuroscience Lab, University of California, United States*

The underlying neurobiology of emerging psychotic disorders is not well understood. While there is evidence from structural imaging and other studies supporting the popular notion that schizophrenia arises

as a consequence of an ''early neurodevelopmental'' lesion, more recent findings challenge this notion. Evidence is emerging to suggest that dynamic brain changes occur during the earliest stages of a psychotic illness, including around the time of transition to illness. In line with this, our initial longitudinal MRI findings in a group of individuals at ultra -high risk for developing a psychotic illness identified progressive neuroanatomical changes in those who went on to develop an illness, compared to the group who did not (Pantelis et al, Lancet 2003). In the context of a staging model of psychosis (McGorry et al, Aus NZ J Psychiatry, 2006) we have undertaken a further series of longitudinal studies from ultra-high risk for psychosis and first-episode psychosis (FEP) through to chronic illness. Using novel automated methods of analysis, I will summarize the findings from these ongoing studies, which have identified progressive regionally and temporally specific changes over the course of the illness. Concurrently, neuropsychological evidence from our 10-year follow up study of FEP has identified progressive cognitive decline, specifically in attentional set-shifting ability and paired associate learning. Together, these changes are consistent with the neuroanatomical changes observed on the MRI scans of these patients. Additionally, I will place the subtle but complex nature of these neuroanatomical and neuropsychological changes throughout the course of schizophrenia in the context of what we know about normal and abnormal brain maturation.

Taken together, the available evidence suggests that there are regionally and temporally specific neurobiological changes through the course of psychosis (Pantelis et al, Schizophrenia Bull, 2005), including: (i) evidence for early (pre- and peri-natal) neurodevelopmental anomalies (ii) evidence of late (post-pubertal) neurodevelopmental changes during the early stages of psychosis, involving an acceleration of normal brain maturational processes, associated with significant loss of grey matter in prefrontal regions, and (iii) evidence for progressive grey-matter loss involving medial temporal and prefrontal regions around the time of transition to illness.

Whilst the pathological processes underlying such progressive changes during ''late neurodevelopment'' remain unclear they may reflect anomalies of synaptic plasticity, abnormal brain maturation, the adverse effects of stress, or other environmental factors. We suggest the features of schizophrenia (eg neuropsychological deficits) can be understood as a consequence of these multiple pathological processes at various neurodevelopmental stages, including genetic and nongenetic etiological factors.

## T11
## OPUS TRIAL: IS INTEGRATED TREATMENT BETTER THAN STANDARD TREATMENT FOR PSYCHOTIC PATIENTS?

***Merete Nordentoft, with M Bertelsen, P Le Quack, P Jeppesen, L Petersen, A Thorup, J Ohlenschlager, T Christensen, G Krarup & P Jorgensen***
*Copenhagen University Hospital, Bispebjerg, Department of Psychiatry Copenhagen Denmark*

**Aim**

To evaluate the effects of integrated treatment for first-episode psychotic patients.

**Method**

In a randomised clinical trial of 547 first-episode patients with schizophrenia spectrum disorders, effects of integrated treatment provided by OPUS team and standard treatment was compared. The OPUS treatment lasted for two years and consisted of assertive community treatment with programmes for family-involvement and social skills training. Standard treatment offered contact with a community mental health centre. Patients were assessed at entry and after one, two and five years by investigators that were not involved in treatment.

**Results**

At the one-year and two-year follow-up psychotic and negative symptoms changed in favour of OPUS treatment. Patients in OPUS treatment had significantly less co-morbid substance abuse, better adherence to treatment, and more satisfaction with treatment. Use of bed days was 22 percent less in OPUS treatment than in standard treatment. Results of five-year follow-up showed that the positive effects on clinical symptoms were no longer present but patients in OPUS treatment were more likely to live independently.

**Conclusion**

Integrated treatment improved clinical outcome and adherence to treatment. The improvement in clinical outcome was consistent in the one-year and two-year follow-ups.

# T12

## THREE YEAR OUTCOMES OF AN EARLY INTERVENTION FOR PSYCHOSIS SERVICE AS COMPARED WITH TREATMENT AS USUAL FOR FIRST PSYCHOTIC EPISODES IN A STANDARD COMMUNITY MENTAL HEALTH TEAM
## Final results

***Mark Agius[1], Samir Shah[2], Roshelle Ramkisson[2], Suzanne Murphy[3] & Rashid Zaman[1]***
*[1]Bedfordshire Centre for Mental Health Research in association with the University of Cambridge [BCMHR-CU]*
*[2]Bedfordshire and Luton Partnership Trust*
*[3]University of Luton, UK*

***Key Words:*** *Early Intervention in Psychosis - Outcome Measurement - Psycho-Social Interventions - Psycho-Education - Relapse Prevention - Assertive Community Treatment - Community Mental Health Team*

Sixty-two patients who had been treated for three years in an ad-hoc, assertive treatment team for patients who had suffered a first psychotic episode were compared to sixty-two patients who had been followed up after a first psychotic episode in a community mental health team. All patients had suffered a first or early psychotic episode. The main differences between the two teams was that the ad-hoc team was assertive in its approach, offered more structured psycho-education, relapse prevention and psycho-social interventions, and had a policy of using atypical anti-psychotics at the lowest effective dose.

There were many differences in outcome measures at the end of three years between the two groups.

The early intervention [EI] patients are more likely to be taking medication at the end of three years. They are more compliant with medication. They are more likely to be prescribed Atypical Medication.

The EI patients are more likely to have returned to Work or Education.

The EI patients are more likely to remain living with their families.

They are less likely to suffer depression to the extent of requiring anti-depressants. They appear to commit less suicide attempts.

The patients in the EI service also appear to be less likely to suffer relapse and re-hospitalisation,, and are less likely to have involuntary admission to hospital. They have systematic relapse prevention plans based on Early Warning Signs. They and their families receive more psycho-education. These indications suggest that the EI patients are at the end of three years better able to manage their illness/vulnerability on their own than the CMHT patients.

More patients in the EI group stopped using illicit drugs than in the CMHT group.

All the above changes were statistically significant except for the total improvement in employment status and education status, which however approached significance.

These results suggest that an ad-hoc Early Intervention Team is more effective than standard Community Mental Health Team in treating psychotic illness.

# T13

## APPLICATION OF NEUROFEEDBACK METHOD IN PSYCHIATRY AND PSYCHOLOGY

***Sanja Martic-Biocina[1], Ana Vodanovic Kosic[2], Drazen Begic[3] & Sanja Budmir[4]***
*[1]Psychiatric Hospital Vrapče, Zagreb, Croatia*
*[2]Practice for psychological treatment, biofeedback and psyhosomatics «Mens sana», Zagreb, Croatia*
*[3]University Psychiatric Clinic Rebro, Clinical Hospital Centre Zagreb, Croatia*
*[4]University Centre for Croatian Studies, Department of Psychology, Zagreb, Croatia*

Our goal is to present a method of self-regulation based on operant conditioning of EEG frequencies. This method is known as EEG biofeedback, or neurofeedback /NFB/.

Thirty years ago, research demonstrated that operant conditioning on EEG frequency distributions effected significant changes in behaviour alterations in sleep architecture in cats. Researchers found that the EEG changes reduced susceptibility to chemically induced seizures. There was little basis for understanding these startling results at the time, but since then many studies had been conducted in that field.

Large Scale clinical application of NFB method has started since the nineties. The main reason for this was the development of effective and cheap computer devices necessary for the fast feedback of the EEG changes to the brain through visual and auditory channels.

We shall present some double bind controlled studies which prove the efficacy of NFB treatment in depression, ADHD, anxiety, stress related disorders, PTSD, personality disorders, addiction and in peak performance training of athletes, ballet dancers and musicians.

# T14

## TRANSCRANIAL MAGNETIC STIMULATION (TMS) IN PSYCHOSIS

***Rashid Zaman***
*BLPT, BCMHR-CU, University of Cambridge, UK*

Transcranial magnetic stimulation (TMS) is a non-invasive and painless way of electrically stimulating the neural tissue (cerebral cortex, spinal roots, and cranial and peripheral nerves).

First successfully carried out by Anthony Barker and colleagues at University of Sheffield, UK in 1985 (Barker et al 1985), it soon became a useful tool for neurophysiologists and neurologists, followed by Psychiatrists.

The principle behind TMS is relatively simple. A generated electrical current on suddenly passing through a wire coil, momentarily generates a magnetic field, which unlike a direct electrical current penetrates the skull easily and painlessly. Inside the skull this magnetic field induces electric current, which fires off neurons in the targeted region of the brain. Although, TMS only effects neurons relatively close to the surface of the cerebral cortex, some of its effects are thought involve deeper structures due to transynaptic transmission.

In early 1990s came the development of more powerful and refined method over the single pulse TMS. This was described as repetitive transcranial magnetic stimulation (rTMS). The frequency range of rTMS machines ranged from 1Hz to as high as 50Hz. The use of rTMS over other cortical regions (apart from the motor cortex) showed effects on mood, and behaviour, leading researchers to investigate a number of psychiatric and neuropsychiatric disorders, as well as, explore its therapeutic potential.

There is now large amount of literature on use of TMS/rTMs in depression, however, its use in psychosis, both as an investigative and therapeutic tool is relatively recent with limited number of publications.

In this talk, I will concentrate on published findings in psychosis research using TMS/rTMS, which includes our own “First serial electrophysiological case studies of the human corticospinal system in schizophrenia”.

# T15

## DISEASE BIOMARKERS IN FIRST-ONSET SCHIZOPHRENIA

***Sabine Bahn and colleagues***
*Institute of Biotechnology, University of Cambridge, UK*

At present, little is known about the basic mechanisms that underlie the schizophrenia disease process. This lack of knowledge is most likely due to the fact that until recently large-scale expression profiling studies were technologically impossible. Thus, most researchers employed a “candidate gene/protein” approach. With recent technological advances in genomics, proteomics and metabolomics techniques, it is now possible to globally investigate the molecular underpinnings of psychiatric conditions which should result in improved knowledge and hopefully new (pre-symptomatic) diagnostic, therapeutic and preventative regimes.

Our laboratory combines advanced computing and bioscience technologies with multi-omics studies. Using this powerful approach we explore the molecular “fingerprints” of psychotic disorders from early onset through their progressive stages, exploring alterations at the gene, protein, lipid and metabolite level.

A further aim is to establish whether disease related changes can be traced in peripheral tissues. Amongst other tissues, we have investigated T-cell function in schizophrenia patients and have identified significant alteration in signalling mechanisms. The key aim of this study is to establish a suitable surrogate ‘disease model’, allowing for dynamic functional investigations of disease-associated pathophysiological mechanisms as well as the identification of schizophrenia biomarkers, whilst limiting problems such as drug and post mortem effects.

Thank you to the Stanley Medical Research Institute for Centre support.

# T16

## T CELLS AS A MODEL FOR BIOMARKER DISCOVERY IN FIRST EPISODE PSYCHOSIS

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Many studies of schizophrenia focus on the analysis of post mortem brain tissue; however, such studies can only provide us with information regarding molecular expression at the time of death. Here, we used T cells as a peripheral model to investigate signalling processes in the living patient. In a previous study we found lower proliferative responses in T cells from schizophrenic patients compared to healthy control subjects when stimulated with anti-CD3. To understand whether these differences derive from cell extrinsic factors, such as hormones in the patient's body, we investigated the impact of serum from drug naïve, first-onset schizophrenia patients on healthy T cells. We found enhanced lymphocyte proliferation induced by patient compared to control serum ($p < 0.001$). To further verify this result we characterized and compared the expression of activation markers CD69, CD25, CD26, CD27, and CD28 as well as TCR complex molecules (TCRα/ß, CD3) before and after T cell stimulation by four-color flow cytometry. The expression of the early activation marker CD69, the late activation marker $CD25^{high}$ as well as CD26 and CD27 in both CD4+ and CD8+ stimulated T cells was significantly stronger up-regulated by patient compared to control serum. In contrast, patient serum induced the TCR complex molecules TCR / and CD3 to be significantly lower expressed after stimulation in both CD4+ and CD8+ cells. In addition, cross-linking CD69 on T cells revealed substantially lower calcium flux in patient-serum treated cells. Overall, these findings indicate that altered factors could be present in the patients' sera which chronically regulate T cell responsiveness, proliferation and the expression of cell surface markers. These may have the potential to serve as biomarkers for schizophrenia.

This work is funded by The Stanley Medical Research Institute (SMRI) and NARSAD.

# T17

## GENDER DIFFERENCES IN THE ONSET, COURSE AND OUTCOME OF SCHIZOPHRENIA

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During the last decade schizophrenia research has emphasized the importance of gender differences. The purpose of the present study was to analyse gender differences with regard to some important sociodemographic variables, age at onset, treatment, course and outcome in schizophrenic patients treated at the Psychiatric Clinic in Clinical Hospital Osijek, Croatia. A total of 221 patients (108 males and 113 females) who were treated as outpatients during the year 2001-2002 formed the study population. Gender differences were analysed through retrospective analysis of medical records as well as with the Interview for the Retrospective Assessment of the Onset of Schizophrenia (IRAOS). The results suggest that the mean age of schizophrenia was earlier in males than in females. There seems to be a significant period of time difference between the first sign of psychiatric symptoms and the first psychiatric hospitalization of schizophrenic patients. Men had poorer social functioning than women. Gender differences are one of the main topics which should be taken into consideration in the treatment of the patients and in developing adequate treatment methods.

# T18

## DURATION OF UNTREATED PSYCHOSIS AND IT'S EFFECT ON THE COURSE OF SCHIZOPHRENIA

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***Keywords:*** *schizophrenia - prognosis - duration of untreated psychosis - outcome*

**Objectives**

The aim of our study is to test the hypothesis that patients with longer DUP (group 2) have poorer prognosis compared to patients who were treated with antipsychotics in the prodromal phase of schizophrenia, before the acute manifestation of positive psychotic symptoms (group 1).

**Study design**

Eighty-seven patients with schizophrenia were included in the study.. All the data is acquired retrospectively from the patients´ records. The Clinical criteria for schizophrenia are met according to ICD-10.

Thirty-seven patients comprised group 1. They had an average age of 38 years, and 50 patients comprised group 2. They had an average age of 41 years. The course and outcome of the disease was studied in the two groups. The severity of schizophrenia was evaluated by measuring several clinical and paraclinical parameters.

We measured all the parameters three times during the course of the illness in both groups, including psychopathological status assessed with a checklist of symptoms based on the list in the CAARMS inventory (3), number and days of hospitalizations, average daily dose of antipsychotic drug calculated in chlorpromazine units (CPU) and age at onset of illness. We also recorded several sociodemographic factors, including education level achieved, employment and marital status. Groups were compared during the first psychotic episode and at the conclusion of the study.

**Results**

The analyses revealed that the most frequent prodromal symptoms in group 1 are anxiety, depression, disorders of sleep and concentration, social isolation, and somatic delusions and hallucinations.

More symptoms of greater intensity were present during the second and third evaluations in group 2 as compared to group 1 patients.

Results suggest that patients who are treated in the prodromal phase (group 1) do appear to have better outcomes in a number of different respects. There are also indications that patients with a long DUP (group 2) have a poorer prognosis.

Results show significant differences in illness outcome in symptom severity , number and days of hospitalizations .Patients in group 2 were hospitalised more frequently; they needed more hospitalisations and these were of longer duration. Only 38% of patients in group 1 were treated in hospital, 27% being hospitalised only once.

Patients in group 1, who had been treated with antipsychotics in the prodromal phase, needed lower doses of antipsychotics as compared to group 2 patients even several years after treatment had been initiated. This effect persisted until the final evaluation; 11% were without antipsychotics at the conclusion of the study.

The vocational status was worse in group 2 patients with higher degree of unemployment and disability. There were more single patients in group 2 during both evaluations. More patients in group 1 were married.

**Conclusions**

DUP is associated with the course and severity of schizophrenia [1,2]. Better outcome of the disease can be achieved with early treatment with anti-psychotics. Patients with a DUP longer than one year differ from patents who have been treated with anti-psychotics in the prodromal phase. The effects on psychopathological symptom severity, in daily antipsychotic dosages, in number and duration of hospitalisations, and in many socio-demgraphic parameters were all shown to be statistically significant.

It should be noted that this paper is the first report on the long term benefits of treatment in the prodromal stage of the disease, even if patients do fully convert to full psychosis, an event which happened in all the patients in group 1.Previous reports on prodromal treatment have focussed on preventing conversion to full psychosis.

The finding that there are substantial long term benefits to treating in the prodrome should shape future practice and also inform the present ethical debates regarding treatment in the prodrome.

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# T19

## A STUDY OF THE SYMPTOMS OF EARLY PSYCHOSIS

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**Objective**
The symptoms of 35 patients who first presented with prodromes of psychotic illness were studied retrospectively in three stages of their illness. These stages were, the prodrome, conversion into acute psychotic illness, and the phase of recovery. The aim was to carry out an analysis of the symptoms during these three phases, in order to demonstrate how the presentation of the symptoms varied through these three phases.
**Mathods**
We developed a checklist of symptoms based on the list in the CAARMS inventory, which was used to evaluate the presence and severity of symptoms for each patient, during these three different phases described above.
**Results**
We note the importance of somatic symptoms and basic symptoms as being part of the prodrome. Paranoid and positive symptoms such as hallucinations occur later in the prodromal stage and are less frequent and intense in this stage. Negative symptoms may be resent early in the prodromal stage and tend to stay longer in the recovery stage. There are statistically significant differences between prodrome and acute psychosis for basic symptoms, negative symptoms, positive symptoms and disorganisation symptoms. There is no such significant difference for depression and anxiety symptoms. These findings occurred twice, with a sample of 21 patients and another sample of 35 patients.
**Conclusions**
Different symptoms tend to start at different times in the illness. These findings are consistent with the suggestion that, in the case of basic, positive, negative, and disorganised syndromes, these syndromes are linked with different activator genes, which begin to operate at different times in the illness. In the case of depression and anxiety, other mechanisms may also apply.

# T20

## COGNITIVE THERAPY IN RELAPSE PREVENTION IN AFFECTIVE DISORDER

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Relapse and recurrence rates in depression have remained moderately high, in spite of the use of maintenance medications. It appears that although these are efficacious, there are many patients for whom they are insufficient, or who do not take them adequately. There is therefore a need to consider alternative treatments. In recent years the most promising of these has been found to be cognitive therapy. The evidence for this effect will be reviewed, including studies undertaken in Cambridge. In unipolar depression there have now been seven randomised controlled trials designed to test relapse and recurrence prevention and showing considerable benefit. There is now a good case for using CBT as an

adjunct to maintenance medication in circumstances of vulnerability, such as residual symptoms, history of previous relapses and episodes, symptom return as medication is reduced. In bipolar disorder the evidence is less strong, with one trial positive and one negative, and definite recommendations cannot yet be made. Psychoeducation and other psychological approaches may emerge to be of greater benefit for bipolars.

# T21

## DIAGNOSES AND TREATMENT OF PSYCHOTIC PTSD

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The rate of comorbidity is especially high in combat-related PTSD and up to 80 % of individuals with PTSD meet criteria for at least one of the psychiatric diagnosis. The most frequent diagnoses are: major depressive disorder, other anxiety disorders, substance abuse, somatization, personality disorders, and dissociative disorders. There are also atypical clinical pictures of PTSD, as well as the difference in clinical presentation of the symptoms.

Up to 40 % of combat veterans with PTSD may have comorbid psychotic symptoms or meet criteria for a comorbid psychotic disorder diagnosis. Many of these patients have hallucinations, paranoid ideation, or disorganized behaviour. PTSD with psychotic features may be a distinct subtype of the disorder.

Since PTSD is classified as an anxiety disorder, the treatment of PTSD includes the use of selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants, monoamine oxidase inhibitors, adrenergic and antianxiety agenst, mood stabilizers, etc.

War veterans, resistant to the antidepressants and other pharmacotherapy with current and chronic PTSD, comorbid with psychotic symptoms, were treated with novel antipsyhotics in three open label studies. First one was comparative 6-week study with olanzapine (N=28) or fluphenazine (N=27) in 5-10 mg/day dose range, once or twice daily. Second one was an open trial study of treatment with risperidone (2-4 mg/day) given as a monotherapy. In 26 male war veterans during 6-weeks. Third one was a monotherapy with quetiapine in a dose range (25-400 mg/daily, during 8-weeks in 53 male war veterans

Treatment of severe insomnia and nightmares in 34 PTSD war veterans with clozapine (50 mg day) in the evening for 7 days showed significant reduction in the HAMD items for sleep disorders and the item D1 of Watson‘s scale for PTSD, CGI-S, and PGI-S.

**Conclusion**

Atypical antipsychotic, given as a monotherapy, significantly reduced PTSD and psychotic symptoms, and showed beneficial effects in war veterans with treatment-resistant psychotic combat-related PTSD. Clozapine was shown to be efficient in veterans having PTSD with severe sleep disorders and nightmares, due to its strong sedative and anxiolytic effect.

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# T22

## NEUROBIOLOGY OF PSYCHOTIC PTSD

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Posttraumatic stress disorder (PTSD) is a psychiatric disorder that develops in some but not all persons exposed to traumatic experiences. Therefore some other factors (biological, genetic, environmental, early experiences) must be present to precipitate the development of PTSD. Combat-related PTSD is a more severe form of PTSD, sometimes associated with psychotic features. Our data, obtained in male Croatian war veterans with current and chronic combat related PTSD (SCID, DSM-IV criteria, CAPS, PANSS), with and without psychotic features, aimed to determine biomarkers associated with psychotic symptoms in PTSD.

Platelet monoamine oxidase (MAO-B) activity is associated with particular personality traits and behaviours. Platelet MAO-B activity, controlled for smoking status, was significantly higher in veterans with psychotic than non-psychotic PTSD, suggesting that it might be used as a peripheral marker of the psychotic symptoms in PTSD.

The MAO-B intron 13 polymorphism (a G/A substitution) was not functional, and did not affect platelet MAO-B activity.

The allele frequencies of the genotypes for MAO-B, dopamine-beta-hydroxylase (DBH), catechol-O-methyl-transferase, and brain derived neurotrophic factor, were similarly distributed among psychotic or non-psychotic PTSD veterans.

Plasma DBH activity did not differ between psychotic and non-psychotic PTSD veterans. DBH-1021C/T polymorphism was functional, and carriers of CC genotype had the highest DBH activity. These results suggest that DBH activity should be controlled for DBH genotypes, but DBH activity did not differentiate between psychotic and non-psychotic symptoms.

Higher platelet serotonin (5-HT) concentration was associated with psychotic symptoms in different disorders. In agreement, platelet 5-HT concentration was significantly higher in veterans with psychotic than non-psychotic PTSD, and was related to positive symptoms (delusions) in PANSS subscale. These results indicate that platelet 5-HT might be used as a trait marker of psychotic symptoms in PTSD.

The allele frequencies of the 5-HT transporter (5-HTT) genotype (5-HTTLPR) were significantly different between veterans with psychotic or non-psychotic PTSD, presumably due to the higher frequency of L alleles.

Our data show a biological distinction (in platelet 5-HT and platelet MAO-B, and different distribution of 5-HTT genotypes) in veterans with psychotic compared to non-psychotic PTSD.

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# T23

## TRAUMA, SHAME, AND THE PSYCHOTIC ANSWER

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Modern societies are growing ever more sensitive to the various sources and many kinds of psychic traumas. The captivity situation especially represents the prolonged basis for chronic severe psychic stress and traumatisation, which may become deleterious even for the core self of one person.

In the aftermath of the captivity situation survivors of extreme forms of violence and humiliation are

very reluctant to recall traumas. This avoidant behaviour is often one of the most prominent symptoms that should be recognised and confronted in order to start the retraumatising process of healing the previously unthinkable traumas. The presenter believes that shameful feelings are at the very basis of psychotraumatised persons' withdrawal, depression, or suicidal attempts. The main feature of the first phase of any therapeutic work with these patients is the mourning process that should gradually unfold. The clinical examples will illustrate therapeutic work with these patients.

The presenter will expose some basic psychodynamic approaches and concepts regarding shame. This difficult feeling will be put in relationship with psychotic answers. The concept of 'near psychosis' will be described in this frame of reference.

# T24

## IMPACT OF SCHIZOPHRENIA CANDIDATE GENES ON SCHIZOTYPY AND COGNITIVE ENDOPHENOTYPES AT THE POPULATION LEVEL

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**Background**

Aspects of cognitive function and schizotypy have been proposed as potential endophenotypes for schizophrenia. It is unknown if the expression of these endophenotypes at the population level is modulated by the genetic variability of candidate susceptibility genes for schizophrenia.

**Methods**

We examined the potential impact of 18 single nucleotide polymorphisms (SNPs) within four susceptibility genes for schizophrenia (DTNBP1, NRG1, DAOA/G32 and DAAO genes) on cognition and self-rated schizotypy, in a representative population of 2,243 young male military conscripts. Single SNP and haplotype associations were evaluated.

**Results**

DTNBP1 SNPs rs2619522 and rs760761 exhibited several single marker associations, the minor alleles being associated with lower attention capacity but also a decrease in positive and paranoid schizotypy scores. DTNBP1 haplotype load had borderline associations with non verbal IQ, paranoid schizotypy and sustained attention. For individual NRG1 polymorphisms, isolated but weak signals of association were noted with sustained attention and working memory, but not schizotypy. The risk allele of functional SNP8NRG243177 was associated with reduced spatial working memory capacity. An isolated effect of DAAO haplotype variability was noted on negative and disorganization schizotypy. No convincing association of DAOA/G32 variability was detected.

**Conclusion**

DTNP1 and less so NRG1 and DAAO variants, may exert gene-specific modulating effects on schizophrenia endophenotypes at the population level.

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# T25

## GENES-ENVIRONMENT INTERACTIONS IN SCHIZOPHRENIA

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There is a growing interest in searching for the genes involved in the etiology of schizophrenia. The fact that genetic studies have had difficulty in discovering the candidate genes maybe due to the heterogeneity and complexity of schizophrenia. Many genetic studies with affected pedigrees or affected sib pairs have had difficulty in finding the major loci by linkage analysis although there is a genetic liability to present schizophrenia in the families of the schizophrenia patients. One of the main reasons for the failure of the genetic studies may be the contribution of environmental factors to the pathogenesis of schizophrenia. Also, the boundaries of psychosis and the clinical characteristics of schizophrenia have not

been well defined. Endophenotypes related to special dysfunctions such as cognitive impairment, psychosis and psychosocial dysfunction must be established in order to exclude the heterogeneity of the disorder. It would be better to include the effect of the environmental factors into the analysis as confounding factors.

Genes may affect brain development and increase the sensitivity of the brain to react to environmental factors in a pathological way. Both predisposing genes and environmental factors may play an additive role in the emergence of the schizophrenia symptoms. Environmental factors such as obstetric complications, migration, discrimination, urbanicity, cannabis and substance abuse, and childhood trauma may induce excessive stress and dopaminergic dysfunction in the mesolimbic and prefrontal areas which have been sensitized because of the presence of candidate genes for psychosis or schizophrenia.

Using the endophenotypes approach related not only to psychopathology but also to neuropsychology, electrophysiology, functional & molecular neuroimaging (e.g. prepulse inhibition, sensory gating deficits, saccadic eye movement, working memory impairments etc.) may enable us to find a link with the parameter and the candidate genes. Furthermore the gene-environment interaction needs to be understood. Epigenetics is a way of understanding the gene-environment interactions. Some researchers believe that epigenetic mechanisms exist to fulfil the need of adaptation to the environment. In complex organisms where genetic change cannot cope with environmental change, epigenetic modelling of chromatin and DNA takes place.

As schizophrenia is believed to be a gene-environment interacting neurodevelopmental disorder, research for unrevealing its mystery should cover these three components. We should be looking for neurodevelopment related molecules in the patients and animal models which mimic some properties of the disorder.

# T26

## HOW GENES ACT IN PSYCHOSIS

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Psychosis affects the most basic human processes of perception and judgment. Psychotic disorders are a group of disorders characterized by psychotic symptoms, by a disruption of cognitive and integrative mental functions, by affective changes and by a severe lack of insight. The Traditional dichotomous classification by Krepelin of the so-called “functional” psychoses leads to a strict separation between schizophrenia and bipolar disorder. From the neurobiological point of view, mental disorders could be evaluated on molecular, cellular, and systems-level. According to recent knowledge, at the molecular level there are probably multiple susceptibility genes, each of small effect, which act in conjunction with environmental factors. These genes could influence synaptic plasticity, neurodevelopment and neurotransmission. However, the new data from genetic studies does not fit well with the dichotomous model of psychoses. Genetic studies of schizophrenia and bipolar disorder are beginning to identify proteins of candidate genetic risk factors for this disorders, including dysbindin, neuregulin 1, DAOA, COMT, BDNF and DISC1, and neurobiological studies of the normal and variant forms of these genes are now well justified. Indeed many of these candidate genes have been found connected with both disorders suggesting an overlap in genetic susceptibility.

# T27

## LONG TERM EFFECTIVENESS AND TOLERABILITY OF ATYPICAL ANTIPSYCHOTICS

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Although randomized clinical trials are needed to analyze efficacy and safety of newer drugs, in many occasions, do not answer questions from day-to-day natural settings. It is even more noticeable with mental disorders, especially psychotic patients, due to very strict criteria, which usually exclude important “real world” variables, like co-morbidities or substance abuse. Prospective observational studies may complement results from randomised clinical trials in real clinical scenarios[1].

High quality observational, non-interventionist studies on atypical antipsychotics are still quite limited. In order to provide valuable effectiveness data or identify emerging side effects, large samples and long follow-ups are desirable. Lately, multicentre studies like SOHO[2], CATIE[3] or national projects like Tiihonen's[4], tried to fulfil these demanding requirements. It would explain, to some extent, why any of them were promoted or sponsored by pharmaceutical companies, able to afford high economical costs whilst testing and promoting their drugs. Nevertheless, if these studies were well conducted and the observer bias was controlled, their results might be taken into account and compared with similar independent studies to generate reliable information[5].

Observational studies must not imply changes in clinical practice and, therefore, contemplate pragmatic measures and outcomes. Indeed, treatment discontinuation, including hospitalization rates, has been recognized as an appropriate pragmatic complement to classical efficacy and tolerability evaluations[2,3,4]. Also, health outcomes should not ignore functional and occupational variations, clarifying what is achievable with different antipsychotics and whether anything else is required to improve the whole course of the illness.

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# T28

## THE USE OF ATYPICALS IN ADOLESCENTS AND YOUNG ADULTS WITH PSYCHOSIS AND PREPSYCHOSIS

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**Objective**

The advent of the second generation of neuroleptics gives rise to the aspiration of changing the prognosis of psychoses. Hence was born a double preventative hope for teenagers and young adults:

1. the possibility that rapid treatment by an "atypical" may change their future;

2. if we knew how to diagnose young people at risk we could treat them before the appearance of the disorder.

What does one know today about schizophrenia and about the other psychoses at the adolescence and what can one reasonably say with regard to these two hopes?

**Method**

We shall try to answer these questions mainly from a review of the international literature.

**Results**

The future of young patients with psychosis is still partially unknown and our capacity to made diagnoses of "at risk for psychosis" is limited.

If early treatment is necessary for a remission, these results may be overvalued for adolescents with positive symptomatology. Some of these patients may experience spontaneous improvement.

If treating young people identified as "at risk" turns out to be protective against the development of psychosis, then we may risk treating up to 75 % of young people wrongly identified as potentially psychotics.

**Conclusion**

Given that psychosis has such a poor prognosis, treatment by an atypical must be rapid and follow up must be effective, especially when the illness begins insidiously and with negative symptoms. However this urgency of treatment must not allow us to forget that the specificity of the diagnosis of these presentations is weak and that stigmatization is also a handicap.

# T29

## PATHWAYS TO CARE IN FIRST EPISODE PSYCHOSIS

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**Background**

First episode psychosis (FEP) studies show that average time between onset of symptoms and first effective treatment is often one year or more[1]. This long duration of untreated psychosis (DUP) is undesirable for various reasons:

1. Early treatment helps minimise the risk of serious consequences [2,3];
2. Shorter DUP is associated with better clinical response.[4];
3. Early results suggest that early intervention in psychosis (EIP) service is more cost effective than generic services.[5]

Recently the attitude to treating 'Psychosis' has changed from focusing on severe and enduring mental illness to include early intervention. New terms appeared including duration of untreated psychosis (DUP) from onset of positive psychotic symptoms until starting treatment and duration of untreated illness (DUI) from onset of prodrome until starting treatment.[6]

Examining the routes to initial treatment for individuals with an emergent psychosis may increase our understanding of the barriers to care and help us develop better intervention strategies[7].

**Aim**

To access the local Primary Care experience of FEP before developing the local EIP service.

**Method**

A confidential questionnaire consisted of 8 questions sent by the Clinical Governance Support Team (CGST) to all Northamptonshire GPs requesting response within 3 weeks.

**Main results**

Response rate is 43% (123 GPs responded out of 284). GPs are less likely to start treatment of FEP. FEP are less likely to ask for a psychiatric referral but more likely to accept if offered by GP. 53% of GPs tend to refer all FEP cases to psychiatric service & 43% only refer those who request/accept referral. 74% of GPs agreed that EIP service was needed, 21% were unsure. The likely causes of delayed referral of FEP by GPs: Patients disengaging, stigma, difficulty accessing psychiatric service, carers' lack of knowledge and diagnostic uncertainty.

**Conclusion**

FEP patients are less likely to ask for referral to psychiatric service but likely to accept if offered. The likely causes for FEP delayed referral to psychiatric service: patients disengaging, stigma, carers' lack of knowledge, service is difficult to access or inappropriate and diagnostic uncertainty. GPs need to be adequately informed about EIP & their important role to achieve this. Early intervention services need to adopt a novel approach to improve FEP access to care.

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# T30

## PSYCHOSIS: WHAT IT IS AND WHAT IT IS NOT. DIAGNOSIS AS AN ETHICAL PROBLEM

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Psychiatric ethics should not be understood as a simple addendum to mainstream bioethics. We know that physical medicine is concerned with areas of human experience and behaviour over which our values are more or less uniform. Psychiatry, in contrast, is concerned with areas of human experience and behaviour – emotion, desire, belief, volition, and so forth – over which our values are highly variable. What is judged a good or bad desire, a good or bad belief, and so on, varies widely, between individuals, between cultures, and at different times.

The ethical problem of diagnosis stems from its capacity for misuse – that is, the knowing misapplication of diagnostic categories to persons to whom they do not apply, a misapplication that may place those individuals at risk for the harmful effects of psychiatric diagnosis. These effects include not only the loss of personal freedom, and not only the subjection to noxious psychiatric environments and treatments, but also the possibility of life-long labelling.

Misdiagnoses may be said to originate in two ways. The first way is purposeful: the psychiatrist applies a standard psychiatric diagnosis to a person for whom he or she knows it to be inappropriate in order to achieve some end that is not, by common definition, medical. For example, the psychiatrist may be under direct and obvious pressure from a family to hospitalize a troublesome member of that family, or from political authorities to hospitalize a troublesome dissident; on the other hand, the psychiatrist may also issue a purposeful misdiagnosis at the person's own request to get a sort of protection or to avoid a worse fate, etc.

But though purposeful misdiagnoses should be a serious concern, there are other, non-purposeful, diagnoses that deserve greatest scrutiny. They deserve it because most misdiagnoses belong in this category. And they deserve it because purposeful misdiagnoses are in general clear and usually understood as unethical, while those that are non-purposeful are much more subtle and insidious, much more a part of the fabric of the field itself, and much more difficult to identify and stop.

# T31

## NORTH BIRMINGHAM ASSERTIVE OUTREACH EVALUATION; PATIENT CHARACTERISTICS AND OUTCOMES

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**Background**

Given the adoption of assertive outreach teams into UK mental health policy, it is important to assess whether gains identified in efficiency studies can be replicated in ordinary clinical settings.

**Aim**

The aim of the study was to assess patient characteristics and clinical outcomes in routine assertive outreach services in the UK.

**Methods**

Patients [N=250] newly taken onto five assertive outreach teams, were followed up over two years. Basic characteristics and outcome measures were compared.

**Results**

Most patients had a ICD10 diagnosis of schizophrenia, schizotypal or delusional disorder and long-standing involvement with psychiatric services. Around a half had a history of substance abuse and violence.

At follow up, the majority had ongoing input from the teams and there was no improvement in symptoms, risk behaviours or social functioning.

**Conclusions**

Patients on assertive outreach teams remain in contact with services and spend less time in hospital yet show little change with respect to clinical outcomes.

# T32

## CHOOSING APPROPRIATE PATIENTS FOR HOME TREATMENT

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**Objective**
To identify clinical and demographic factors that could predict the outcome the home treatment.
**Method**
One hundred and six patients who successfully completed the home treatment were compared on various clinical and demographic factors with 41 patients who failed home treatment using stepwise multiple regression analysis.
**Results**
Employment, gender and a diagnosis of adjustment disorder or depression were independent factors that had a significant positive effect on the success of home treatment. Other variables like ethnicity, living circumstances, marital status, DSH, family history and use of illicit drugs/alcohol had no appreciable effect on the out come.
Comparison of the various diagnostic categories showed that patients with a diagnosis of personality disorder or psychotic disorder were most likely to fail home treatment.
**Conclusion**
Preliminary results from this study indicate that there are certain clinical and demographic factors that appear to influence the outcome with home treatment. Confirmation of these results with further prospective studies would enable us to maximise the use of clinical resources in both hospital and community settings. Such information will have significant clinical implications in the future management of acutely ill patients.

# SATELLITE SYMPOSIUM TALKS

## SS1

### THE ROLE OF MIXED DEPRESSION AND COMORBIDITY AMONG SUICIDE ATTEMPTERS WITH A MAJOR DEPRESSIVE EPISODE

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**Aim**

The purpose of this study was to investigate the prevalence and comorbidity of psychiatric disorders among non-violent suicide attempters in Hungary.

**Method**

Using a structured interview (modified Mini International Neuropsychiatric Interview) determining 16 Axis I psychiatric diagnoses defined by DSM-IV, the authors examined 100 consecutive suicide attempters, aged 18-65.

**Results**

Eighty-eight percent of the attempters had one or more current diagnoses on Axis I. In 69% it was major depressive episode.

Thirty-five percent of the patients with current major depressive episode had had hypomanic (N=19) or manic (N=5) episodes in the past.

Current mixed depression (major depressive episode (MDE) / dysthymic disorder + 3 or more co-occurring hypomanic symptoms) was present in 63.0% in the total sample, and in 70.8% among the 89 depressive suicide attempters.

Seventy percent of the individuals received two or more current diagnoses on Axis I. Eighty-six percent of all current Axis I disorders (except major depressive episode) were diagnosed together with a current major depressive episode. Mixed depression versus non-mixed depression had odds ratio: bipolar II disorder 9.3.

**Conclusion**

In suicide attempters there is a very high prevalence of affective disorders, especially major depression and bipolar II disorder. An important new finding is the very high prevalence of mixed depression among depressed suicide attempters. The rates of mixed depression among bipolar and non-bipolar depressive suicide attempters were much higher than previously reported among nonsuicidal bipolar II and unipolar depressive outpatients, suggesting that suicide attempters come mainly from mixed depressives with predominantly bipolar II base.

## SS2

### PSYCHOSOCIAL AND PSYCHIATRIC CHARACTERISTICS OF SUICIDE ATTEMPTERS IN HUNGARY

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**Background**

Previous international and Hungarian studies have shown that around 90% of persons making suicide attempts had at least one current mental disorder. The aim of this study was to investigate the current prevalence of DSM-IV Axis I psychiatric diagnoses and psychosocial characteristics among suicide attempters in Budapest, Hungary.

**Methods**

Using a structured interview (Mini International Neuropsychiatric Interview) determining DSM-IV Axis I diagnoses, the 110-item affective temperament autoquestionnaire (TEMPS-A) and a semi-structured interview collecting background information, the authors examined 100 consecutive non-violent suicide attempters (68 females and 32 males), aged between 14 and 66 (mean: 36,3 yrs).

**Results**

Ninety-two percent of the attempters had one or more current DSM-IV Axis I psychiatric diagnosis. In 87 % it was depressive disorder (59% unipolar major depression, 14% bipolar II depression and 12% bipolar I depression, 2% dysthymic disorder), in 46% anxiety disorder, in 27% substance-use disorder and in 2% psychotic disorder. None of the subjects have had manic, hypomanic or mixed affective episode at the time of the attempt. Sixty percent of the attempters received two or more current Axis I diagnoses (35% depressive + anxiety disorder, 15% depressive + substance-use disorder and 10% depressive + anxiety + substance-use disorder). Four of the five affective temperaments containing more and less of a depressive component (depressive, cyclothymic, irritable and anxious) was significantly more frequent and hyperthymic temperament was non-significantly less frequent among the attempters. The most common method of the suicide attempt was drug overdose (96%, in 21% in combination with alcohol ingestion). Sixty-four percent of the subjects were repeated attempters, 49% were economically inactive, and 69% were never married, separated/divorced or widowed. Limitations: Axis II (personality) disorders were not investigated. Non-violent suicide attempters are not representative for all persons with attempted suicide

**Conclusion**

This study supports previous international and Hungarian findings on the high prevalence of Axis I mental disorders (especially mood disorders) among persons with suicide attempt, and underlines the importance of adverse psycho-social factors in self-destructive behaviour.

# SS3

## ASSOCIATION BETWEEN FACTORS RELATED TO RISK OF SUICIDE: HOPELESSNESS, AGGRESSION, IMPULSIVITY AND THE 5HTTLPR S ALLELE

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**Introduction**

Suicidal behaviour has earlier been associated with impulsivity, aggression, and it was demonstrated that the presence of the 5HTTLPR s allele is more frequent among suicide attempters. Hopelessness is considered a strong and valid predictor of suicide. The aim of our study was to investigate possible association of hopelessness, aggression, impulsivity and the 5HTTLPR s allele in psychiatrically healthy subjects who have never attempted suicide.

**Methods**

135 psychiatrically healthy women participated in the study. All participants completed the Buss-Durkee Hostility inventory, the Barratt Impulsiveness Scale (Bis-11) and the Temperament Evaluation of Memphis, Pisa, Paris and San Diego questionnaire (TEMPS-A). 5HTTLPR genotypes were determined by PCR. Results were analysed using Analysis of Covariance and forward stepwise regression.

Results: ANCOVA indicated that there is a strong relationship between Hopelessness and the studied characteristics. Forward stepwise regression indicated a significant role for depressive temperament (beta=0.2539, p=0.0101), anxious temperament (beta=0.2462, p=0.0099), hostility (beta=0.2749, p=0.0022) and indirect aggression (beta=-0.1826, p=0.0227), in predicting hopelessness. Adjusted whole model R2 was 34.0%.

**Conclusion**

Our results indicate that depressive and anxious affective temperaments, hostility and indirect aggression influence Hopelessness, which has an important predictive role in the emergence of suicidal behaviour. Our results have implication for the recognition and prevention of possible emergence of suicidal behaviour within the healthy, non-depressed population.

# SS4

## DECLINING SUICIDE MORTALITY IN HUNGARY; WHAT ARE THE MAIN CAUSES?

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**Aim**
To analyse the main causes of the steadily declining suicide mortality of Hungary between 1984 and 2005.
**Method**
The suicide rate of the country, the number of all suicide events reported by the National Ambulance Service ("suicide events"), the sale of antidepressants, and several other parameters (unemployment, alcohol consumption, GDP, divorce rate, number of psychiatrists and outpatient psychiatric departments etc) are evaluated.
**Results**
The suicide rate of Hungary has shown a steady decrease from 45.9 (1984) to 25.9 (2005), a fall more than 44%. During the same period the number of psychiatrists and outpatient psychiatric departments increased substantially and the prescription of antidepressants was raised from 2.6 DDD/1000 persons/day (1984) to 23 DDD/1000 persons/day (2005), a 780% increase. More than 93% of all antidepressants prescribed in Hungary were SSRIs and other new compounds in 2005. The less toxic nature of new antidepressants also seems to play a contributory role. The number of all suicide events also decreased substantially from 23.729 (1986) to 8.477 (2005), a 74% decrease. Other parameters (unemployment, alcohol consumption, divorce rate etc) did not show a significant relationship with suicide mortality.
**Conclusion**
The results suggest that better recognition and more effective treatment of depressive disorders are important (but not the only) factors in declining suicide mortality of Hungary.

# SS5

## PHARMACOLOGY AND FORMULATION: MINIMISING THE SIDE EFFECTS OF ANTIPSYCHOTIC DRUGS

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Despite the the value of the antipsychotic drugs in the treatment of schizophrenia and other psychotic illness, they do have substantial limitations. After treatment, many patients experience some relief of positive symptoms but still have cognitive deficits and negative symptoms. In addition to these residual and unresponding features are the many side effects induced by antipsychotic treatments. Unlike variation in treatment response, side effects are relatively well understood in terms of pharmacology. Extrapyramidal side effects and hyperprolactinaemia are associated with dopamine D2 receptor blockade in striatum and pituitary respectively, weight gain with 5-HT2C, and perhaps H1, receptor antagonism in the hypothalamus, and hypotension with peripheral alpha1A adrenoceptor blockade.

Circadian fluctuations in plasma drug concentrations may be substantial and result in transiently high receptor binding and emergence of side effects which would perhaps not occur with more stable plasma drug concentrations. Long-acting or depot formulations provide this stability; they may thus minimise peripheral side effects or those controlled by regions of the brain less protected by a blood-brain barrier such as the pituitary and regions of the hypothalamus. A new drug delivery technology which, although orally administered, does stabilise plasma levels of drug is available for the new antipsychotic paliperidone. Here slow release capsules use an osmotic pump to release drug at a constant rate over 24 hours. This provides stable blood concentrations, presumably optimising treatment efficacy, in contrast to the predictable post-dose peak followed by declining concentrations seen after most oral drug doses. Initial findings suggest it is associated with relatively low weight gain; although as yet unproven, this formulation might contribute to improving side effect profile.

# SS6

## HI-END SPATIAL INFORMATION TECHNOLOGIES: A CASE FOR MENTAL HEALTH

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***Keywords:*** *Geographical (spatial) Information Systems (GIS) - hotspots - socio-economic - land-use - inner-city – Malta – Gozo - spatio-temporal - CRISOLA*

Mental health 'incidences' are essentially tied to a spatial location: those parameters emanating from other than purely physiological and psychological triggers. The issue of spatio-temporal social interaction which identifies locational constructs such as patient's residence, everyday interactions and the resultant impacts of the neighbourhood fabric calls for a holistic approach in understanding health issues. This reality is why aetiology in mental health is described as bio-psycho-social. Recent observations suggest that serious mental illness [including Schizophrenia, Depressive psychosis and bipolar disorder] is more prevalent in inner cities. However, little explanation has thus far been offered as to what inner city socio-structural factors might induce the development of psychosis.

Based on an innovative Maltese spatio-temporal criminology study by Formosa (2007) that bridged the gap between urban-planning and socio-economic parameters, this study aims to further investigate the use of high-end geographical information systems (GIS) to serve as a tool for mental health epidemiological specialists. The Malta Study investigated routine-activity theory and opportunity theory, as based on the Chicago School Environmental Criminology model.

For this purpose, the original criminology study data will be used to demonstrate the method, which depicts spatio-temporal aspects based on where offenders live, interact and commit crime. The 50-year analysis' findings highlight highly-specific local-offender social situations with residential and poverty clustering. A feature of the system is that poverty is demonstrated by the use of government social/epidemiological data, which when analyzed produced maps of cumulatively higher and lower poverty risk. Residential analysis show a preference for the harbour region where offenders live in areas characterised by poverty that have disproportionate offender concentrations when compared to their shrinking population concentration.

The review of Malta's crime within a social and land-use structure lead to a CRISOLA model which can be investigated within the mental health scenario particularly with reference to patient's residence location, social cohesion, the impacts of spatial planning on well-being (clustering and distance), inner city impacts on social parameters and the issue of hotspots in relation to the daily/seasonal/temporal patients' interactions.

This study shall investigate mental health epidemiology in the island of Gozo; taking into account the incidence-reporting bias posited by the demographic, socio-economic, affluence and insularity factors. The intention is to map variables such as diagnosis and family history in correlation with the already established social factors, so as to identify correlation strengths with the social variables. The researchers will attempt to run a parallel London-area comparative study.

# SS7

## MINIMISING METABOLIC AND CARDIOVASCULAR RISK IN SCHIZOPHRENIA: DIABETES, OBESITY AND DYSLIPIDAEMIA

***Peter B Jones***
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There is increasing concern about the long-term physical health of people treated for schizophrenia who have increased age-specific mortality and morbidity, particularly from cardiovascular disease (CVD). Cardiovascular risk factors are suboptimal with patients showing prematurely aged risk profiles. A key issue is the extent to which CVD risk is mediated by disease-specific factors, associated lifestyle characteristics (e.g. smoking and lack and exercise) or caused by antipsychotic drug treatment.

Regarding the last of these, it is now clear that antipsychotic drugs differ in the extent to which their

use is associated with weight gain, sedation and abnormalities in lipid and glucose metabolism at the pre-clinical and clinical (eg diabetes) levels. Given these facts, physicians, psychiatrists and mental health services now need to take physical health into account when considering the management of people with schizophrenia and other conditions where antipsychotic drugs are used.

There remain questions as to how the best holistic care is partitioned across primary and secondary care. Many of these issues have recently been considered in a new set of guidelines (Barnett et al., 2007); these will be discussed in the international context.

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# POSTERS

## SERVICE DEVELOPMENT AND OUTCOMES

### P1.1

### THREE YEAR OUTCOMES IN AN EARLY INTERVENTION SERVICE FOR PSYCHOSIS IN A MULTICULTURAL AND MULTIETHNIC POPULATION

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**Background**

Concern has been expressed that it may be difficult to provide certain interventions to some ethnic groups in an Early Intervention Service for Psychosis, and that as a consequence, three-year outcomes for the different Ethnic Groups may be different in different groups.

**Aims and Methods**

In order to test this, the three-year outcomes for the first group of 62 Patients to receive three years treatment in the Early Intervention Service in Luton, Bedfordshire were examined. This group well represented the ethnic mix of the population of Luton.

**Results**

It does not appear that there are major differences between the three-year outcomes of any one of the three groups studied.

However the South Asian Patients appear to present earlier, with shorter DUPs, seemed more likely to marry, live with their families, and seem more likely to return to higher education after a first psychotic episode of psychosis compared to the Caucasians. These facts are probably due to cultural factors among the South Asians born in this country, rather than to issues related to the Psychotic Illness itself.

Afro-Carribeans and South Asians were more likely to be unemployed, but many South Asians were employed, as were Caucasians. The fewest persons employed were in the Afro-Carribean group.

While slightly more South Asians and Afro-Caribbeans were admitted compulsorily under the mental health act over the three years, 60% of each of the two non-white groups were never admitted compulsorily. This is different from the reported national trends of the Mental Health act being used excessively with the Afro-Carribean population.

**Conclusions**

The above conclusions must be understood as relating to patients who are well engaged with services. It would be unwise to extrapolate these outcomes to patients in the general population who have not engaged with services.

### P1.2

### DEVELOPING OUTCOME MEASURES FOR SERIOUS MENTAL ILLNESS; USING EARLY INTERVENTION AS AN EXAMPLE

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***Key Words:*** *Serious Mental Illness - Early Intervention In Psychosis - Audit - Outcome Measurement - Psycho-Social Interventions - Psycho-Education - Relapse Prevention - Assertive Community Treatment - Community Mental Health Team*

**Introduction**

Developing useful outcome measures for the treatment of serious mental illness is important for services.

We have developed a method for measuring outcomes in Early Intervention in Psychosis (Dzubur-Kulenovic 2003).

**Methods**

Sixty-two patients who had been treated for three years in an EI team for patients with a first psychotic episode were compared to sixty-two patients who had been followed up after such an episode in a community mental health team.

The EI team was assertive, offered more psycho-education, relapse prevention and psycho-social interventions, and used atypical anti-psychotics (Agius 2007).

**Results**

The EI patients were more compliant with taking atypical antipsychotic medication at the end of three years.

More EI patients returned to Work or Education.

More EI Patients lived with their families.

Fewer EI patients suffered depression or attempted suicide.

Fewer EI patients suffered relapse and re-hospitalisation, including involuntary admission. Because of relapse prevention plans and psycho-education they were better able to manage their illness.

More EI patients stopped using illicit drugs.

All these changes were statistically significant except for the improvement in employment status and education status, which approached significance (Agius 2007).

**Discussion**

Methodology for outcome measurement is discussed. Measurement should demonstrate functional or quality of life improvement. Systematic recording of at first presentation of the case, enables the demonstration of change. This is a necessary ongoing audit activity for services. When assessing new services, it is necessary to include a control group from previous services, in order to establish benchmarks for with which the outcomes of the new service. This constitutes audit, not research, but should be still amenable to statistical analysis. In order to be meaningful, it is necessary that outcome measures should be carried out regularly, at specified time periods.

Rating scales, which measure the number and the intensity of symptoms should be used. Computer based notes facilitate audit.

# P1.3

## A CASE REPORT ON CASE MANAGEMENT FOR CHRONIC PSYCHOSIS IN CROATIA «SINCE I HAVE MY CASE MANAGER, I AM BACK TO LIFE»

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***Key words:*** *Case management - Croatian case management model - Community mental health team - Rehabilitation centre - case manager*

The authors are presenting a case report of a patient who was treated by a case manager, a member of a Croatian Community Mental Health (CMH) Team, following the recommendations of WHO 2004 as well as the IRIS guidelines and the Basic Standards for Management of Patients with Serious Mental Illness in the Community (Agius 2005) and using the elements of Clinical case management (Muser 1998), Assertive community treatment model (Burns 1995, Scott 1995, Wolfsan 1990), the personal strength model (Rapp 1988) and Rehabilitation model (Anthony 1993). In order to emphasize the importance of the therapist-patient relationships in treatment of chronic schizophrenic patients (Ivezić 2001) and creating the group atmosphere a Croatian model of case management is created where the patient's needs and risks are

assessed by a multidisciplinary team who also conducts the recommended psychosocial interventions plan. The majority of interventions are conducted in groups. The case manager makes a confident relationship with a patient and encourages positive transference in order to foster the achievement of the treatment. The main goals of the interventions are empowerment of the patient, improvement of his abilities and decreasing of his disabilities. The case manager also carries out a full assessment of the needs of the patient's family so that the family or carers are also included in the treatment or support if necessary (Gruber 2006). A report on a patient and the work of her case manager as well as the case managers diary (Gruber 2007) and the Croatian model of case management is presented in this poster.

# P1.4

## THE DELIVERY OF A COMPREHENSIVE CHILD AND ADOLESCENT MENTAL HEALTH SERVICE: AN AUDIT OF SKILLS

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**Background**

The Department of Health document entitled "National Service Framework for Children, Young People and Maternity Services: The mental health and psychological wellbeing of children and young people" includes a chapter regarding the development of "high quality multi-disciplinary CAMHS teams". This outlines the number of staff members and the skills necessary to deliver a comprehensive CAMHS. The document states that the provision of such a service is compromised by an inability to recruit these members of the multidisciplinary team and to access their specified skills.

**Aim**

An audit performed in May 2006 assessed whether, at the CAMHS unit at Birch Hill Hospital, Rochdale, the NSF standards were being met.

**Method**

Each team member recorded the therapeutic modalities in which they had experience. The following information was obtained:

1) Designation;
2) Time spent working in CAMHS;
3) Background training.

For each modality the data included:

1) Therapeutic modality;
2) Time spent in training;
3) Whether a recognized qualification had been obtained;
4) Comments on experience of use.

**Results**

29 therapeutic modalities were described, provided by professionals from exceptionally diverse backgrounds. A fascinating insight into the therapies in everyday practice has been obtained by virtue of the qualitative nature in which some of the results are presented.

**Conclusions**

This audit illustrates the diverse nature of skills and backgrounds that this service, which may be typical of services nationally, offers. This group of professionals can provide the interventions identified by the National Service Framework and has a wealth of expertise in other areas, many based on experience, and many of which are not formally recognized by means of a qualification.

# P1.5

## THE PLACE OF RISK ASSESSMENT IN PSYCHIATRY

***Ayaz Ahmed Khan***
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17/12/92 is a date, that is etched into the public and professional consciousness. The day when Christopher Clunis stabbed Jonathan Zito on the platform of Finsbury Park Tube station. Thereafter, risk

assessment has formed an integral part of all our clinical practice. Traditionally, risk has been portrayed as binary concept, and its assessment regarded as a test that can be correctly or incorrectly classified. However, this article discusses how assessing risk is an inherently difficult task, given the low base rate of violence. It is challenging to predict a low frequency event. Invariably, it increases the false negative rate, and leads to discrimination/ stigma, and punitive actions against the mentally ill. All of which generates significant ethical issues. Information sharing whether in MAPPs or to the public, or those at risk, challenges the basic tenants of doctor patient trust and confidentiality.

Using the best risk assessment tools the number needed to detain is given as 6. Probably justifiable, but consider the resource implications of NND of 6, impossible in the current financial climate. Absolute safety cannot be guaranteed. It follows that politicians and the public must be educated to have reasonable expectations of their psychiatric services. The occurrence of violent events is a poor guide to the quality of a particular service.

Risk assessment training should be part of CPD. As the 12 steps to safer service, all mental health staff must receive formal training in risk assessment every 3 years (Appleby et al 2001), an aspiration not being remotely achieved.

# P1.6

## SOCIAL SUPPORT IN THE COMMUNITY AND THE FEELING OF HOPELESSNESS IN PSYCHIATRIC PATIENTS

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***Key words:*** *psychiatric disorders - feeling of hopelessness - despair - social support - community*

**Introduction**

Psychiatric disorders represent a major public health problem because of their frequency and frequently disabling consequences. The inherent trend of assignment of individual rather than collective responsibility for personal physical and psychic health, that becoming present in general public, is not appropriate and acceptable for psychiatric patients. Hence the main aim of caring for psychiatric patients is not only the following the treatment regiments but the education of patients as to how to live with their own psychiatric diseases by providing support and hope through the organization of proper care services in community.

**Methods and patients**

In our investigation we used the data obtained by psychiatric interviews. Three groups of patients, all of whom were hospitalised, were included: 1) patients with psychotic disorders (PSD); 2) patients with personality disorders (PPD); 3) patients with depressive disorders (PDD). We focused on the presence of feelings of hopelessness/despair as possible key clinical symptoms of all psychiatric disorders, especially depressive ones, in particular the correlation between feeling the lack of social support in community and hence a remarkable level of social burden/stigmatization.

**Aim**

The aim of our investigation was to estimate the influence of social support in the community on the individual's feeling of stigmatization by measuring the presence of the clinical symptom of hopelessness/despair in the three groups of patients separately as well as in all the patients altogether.

**Conclusion**

The clinical symptom of hopelessness/despair may be present in psychiatric patients to a in lesser or greater extent according to whether organization of caring services for psychiatric patients in community is good or poor. Social development depends not only on economic capital but also on the quality of human relationships and their willingness to help to the other members of the community – namely by sharing their social capital.

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# P1.7

## USE OF EXCEL DATABASE AND SPREADSHEETS IN AN ACUTE PSYCHIATRIC WARD

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*BCMHR-CU*

**Background**

It is unusual that computerised notekeeping is done on acute psychiatric wards. Although recommended in theory, in practice rating scales are rarely used for outcome measurements in acute psychiatry.

However, present acute psychiatric wards are under great pressure to discharge patients as soon as possible.

Two issues arise; It is necessary to unmistakably show improvement in patients in order to determine outcomes on wards. It is also necessary to ensure that all necessary physical investigations are carried out while patients are on the ward, and that the results of these investigations are clearly documented.

**Method**

We have instituted a ward management system using Excel spreadsheets held on the ward computer. Four spreadsheets are used; PANSS scores are recorded on one spreadsheet. PHQ-9 scores are documented on another spreadsheet. A third spreadsheet documents all cardiovascular risk factors, including weight, BP, Serum Glucose, Cholesterol ,and triglycerides. On the final spreadsheet, all other blood tests-including Urea and Electrolytes, Full Blood Count, Liver and Thyroid function tests and serum prolactin are recorded.

PANSS and PHQ-9 scales are recorded every 2 weeks and the serial results are turned into graphs which chart the patient's recovery.

PHQ-9 was chosen to measure depression because it is patient administered and is in common use in primary care locally.

**Results and Conclusion**

The graphed rating scales have proved very useful in monitoring the improvement of patients. The spreadsheets of blood test results has allowed monitoring to ensure that discharge does not occur prematurely before all tests are available, so ensuring ongoing audit.

# P1.8

## CASE REPORT OF THE FIRST ATTEMPT AT CBT FOR PSYCHOSIS IN CROATIA 'MY NEW ALFA ROMEO GT IS NOT IN THE GARAGE ANY MORE'

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We present a case of co-morbid panic disorder and psychosis with a focus on the successful treatment of the panic disorder via a CBT approach. The patient has had only one episode of psychosis.

The cognitive model of panic disorder is used as a template to consider this young man's psychotic experiences, in the context of some types of delusional beliefs, especially those involving the catastrophic and atypical misinterpretation of the physiological sensations associated with anxiety.

This case is emphasises the therapeutic value in certain patients of focussing therapy on the non-psychotic symptoms once the acute psychotic state has been managed.

# P1.9

## A SURVEY OF PARENTAL USER VIEWS OF CAMHS SERVICE IN CENTRAL MANCHESTER

***Rachel Greer, Latha Hackett & Karim Rajput***
*The Winnicott Centre, Manchester, UK*

**Introduction and Aims**

User views are an increasingly popular method of assessing consumer's expectations and satisfaction with a service. They have an important role to play in the National Health Service (NHS), as the government wants the public to be able to 'shape' it. Documents such as the national service framework (NSF) and every child matters express the need for routine evaluation of user views of child and adolescent mental health services (CAMHS).

The aim of this project was to assess parental user views of The Winnicott Centre, a tier 3 CAMHS service for Central Manchester. Areas of improvement would be identified and an action plan suggested.

**Method**

The commission for health improvement's experience of service questionnaire (CHI-ESQ) was used, collecting both quantitative and qualitative data. Consecutive prospective sampling at routine follow up was undertaken. Informed consent was obtained and interpreters were made available.

**Results**

Of 213 who were eligible, only 159 questionnaires were completed and returned. Analysis of gender revealed 70% male and 30% female, age was normally distributed and ranged from 3 to17 (mean 9.76), ethnicity revealed 63% White/ White British, and 19% were registered disabled. There were higher levels of satisfaction in age groups 3-5 and 15-17, and the registered disabled. Levels of satisfaction varied in different ethnic groups: White (91%) Asian: (90%), Black: (75%) and Other (57%). Generally high levels of satisfaction were expressed with the service and most parents (83.2%) said they would recommend it to others. Parents complimented the staff, felt supported and appreciated that they were listened to.

**Recommendations**

Areas that could be improved include providing enough explanation, convenient appointments and better facilities in the waiting room. Leaflets could provide information on illnesses and public transport. Continued evaluation of user views will help maintain high standards and improve CAMHS for both parents and children.

# P1.10

## MENTAL DISORDER IN PRISONERS IN ENGLAND AND WALES; PREVALENCE AND POLICY

*Jane Sams, Andrew Procter & Karim Rajput*
*Manchester University, UK*

**Introduction**

Mental disorders are more prevalent in the prison population. Currently there is an overcrowding crisis in British prisons (81,000 in 2007). This raises ethical, legal and political concerns. Mental Health was named as a government priority in 1993. Since then there has been a 10% increase in offenders imprisoned and sentences are longer.

The prison environment is punitive, not therapeutic, and has been shown to be detrimental to the psychiatrically vulnerable. Prisoners are entitled to an equivalent quality of service to society at large. Sadly mental disorders are often undetected and untreated with a loss of valuable opportunities to assess health care needs, leading to lack of necessary intervention.

**Aims**

To review the literature concerning prevalence rates of mental disorder in the prison population and consider factors which affect levels of psychiatric morbidity.

**Method**

A literature review using MEDLINE and follow-up of relevant references.

**Results**

Psychiatric morbidity is significantly higher, for diagnoses such as psychosis (3-14%), neurosis (6-76%), personality disorder (7-78%) and substance misuse (26-54%).

Methodological differences between studies, in both sampling and screening, have made it difficult to draw firm conclusions. The majority (66%) of all prisoners did not require any psychiatric treatment. 15% could be treated effectively in prison, but 4% needed inpatient hospital care.

**Discussion**

Government initiatives such as in-reach teams and court liaison hope to result in more appropriate care for individuals, however it is too early to assess their effects.

Appropriate use of the Mental Health Act can facilitate treatment of prisoners.

Interestingly as NHS psychiatric beds have decreased, the prison population has increased.

Anecdotally prison mental health care seems to be a higher priority to both government and the NHS.

More standardized studies need to be conducted, in order to make definite conclusions regarding trends.

# P1.11

## PROCESS MAPPING OF THE REFERRAL PROCESS IN OCCUPATIONAL THERAPY (OT) SERVICES IN ACUTE ADULT MENTAL HEALTH WARDS

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**Aims**

Standardisation of OT referral process service with enhanced multidisciplinary team (MDT) input.

**Background**

We began a unique initiative to process map the use of occupational health services at the acute inpatient unit, aiming at understanding the system and making an already up and running service more effective.

**Methods**

Retrospective perusal of new admission case notes from Jan'03 to March '03.Patient admitted for detox and with </= 5 days admission excluded. Results presented.

Recommendations (Discussion of OT with patients & documentation in MDT notes, Presence of OT staff in the MDT meetings, prompt referrals to OT, Clinical Part I summary of patients sent to OT staff) implemented and re-audited from Oct '05 to Dec'05.

**Results**

Existing process revealed lack of standardisation in referral process with minimal MDT involvement. Only

45% formally referred 50% after having contact with the OT; OT discussed in MDT meetings in only 33% of sample of which 63% was after contact with OT Of those without contact only 33% had documentation, 64% managed OT contact, taking average 9 days for this contact.

Post-recommendation revaluation found 71% attendance of OT staff at the MDT meetings, Referrals increased to 55% with 70% before contact, rise in MDT documentation of OT to 71%, 47% before contact, Of those without contact documentation increased to 47%, OT staff received clinical part I summaries of only 8% of patients. However percentage contact with OT decreased to 60% and average time for contact with the OT increased to 16 days.

**Conclusions**

Lack of standardization and inadequate input from the MDT identified in the referral process to the acute inpatient Occupational therapy services.

Recommendations helped standardize the referral process.

## P1.12

## DEVELOPING A RELEVANT SERVICE FOR 16/17 YEAR OLDS WITH MENTAL HEALTH NEEDS

***Andrew Beck, Clare Farnsworth, Vicky Gillibrand, Louise Theodosiou, Chris Ternent & Diane Walker***
*Manchester, UK.*

CAMHS and adult services have historically struggled to provide a service to 16/17 year olds. In 2005 the Department of Health issued three National Service Framework proxies to be met by December 2006 within Standard 9. One of these addressed the specific need for services to 16/17 year olds. National response to this has varied. Some CAMHS have provided this within their generic teams, while others have developed specific adolescent mental health teams. We describe a team targeting 16/17 year olds.

This team has 5 whole time equivalent staff comprising of 0.8 Managerial, 2.5 Adolescent Mental Health Practitioners, a Consultant Psychologist and Psychiatrist. The Census Report (2001) estimates the number of 16/17 year old adolescents in Manchester to be 10834. The area covered includes the third most deprived borough in the United Kingdom, and areas with high levels of long term illness and unemployment.

The team received 61 referrals during the first 3 months from a variety of statutory and non-statutory sources and a few self referrals. The team has no fixed base to see referrals in and uses a variety of settings including General Practices, Connexions, cafeterias, voluntary sector bases and Youth Offending Teams. Recognising the fact that the needs of this population are often poorly understood and served, considerable resources have been invested in delivering a lively participation group. This group aims to empower young people to have their say, and participate in recruitment.

This poster will detail demographic information and presenting complaints. We will present attendance levels and clinical outcomes, and discuss the particular challenges faced in developing an accessible and responsive service. In the spirit of participation, contributions and comments from young people using the service will be included in the finished poster.

## P1.13

## EVALUATION OF CRISIS TEAMS IN EAST LANCASHIRE – A PROSPECTIVE STUDY

***AS Antonysamy & Waquas Waheed***
*Lancashire Care NHS Trust, Preston UK*

**Aims**

To examine the development and activity of Crisis Resolution Teams in East Lancashire Region in the United Kingdom.

**Methods**

Referral data were collected prospectively from April 2005 to March 2006. Information recorded for each referral included: demographic details like age, gender, ethnicity, source of and reason for referral,

diagnosis, duration of stay within the services and discharge plan and pathway.

**Analysis**

The collected data was entered into the database and analysed using SPSS for Windows software. The trends in pathways to care, source of referrals, duration of stay within the Crisis services and the discharge pathway were also analysed.

**Results**

Majority (75%) of the clients were referred by the Community Mental Health Teams and the Psychiatric Wards. The liaison psychiatric teams and the Police were least likely to refer clients to the crisis teams. There was a steep rise in referral rates too. Those aged between 31 –40 years of age made up more than 90% of the referrals to the crisis teams. Less than 5% were aged below 20 or above 65 years of age. Female clients were almost double the number of male clients. Less than 1% of the ethnic minority groups were referred to the crisis teams.28% suffered from an affective disorder and 15% presented with psychotic symptoms. Less than 10% complained of feeling suicidal or made threats or commit any acts of self harm or even presented with life crisis. 2% contacted the crisis team for advice on medications and only 1% presented with drug or alcohol problems. Most referrals were made on Fridays (30%). Less than 5% were referred during the weekend to the crisis teams. About 50% were managed by the Crisis resolution and Home treatment teams. Only 5% needed admission to the psychiatric ward.

# P1.14

## AN AUDIT TO EVALUATE A HARM REDUCTION STRATEGY DELIVERED TO PATIENTS WITH A DUAL DIAGNOSIS ON THE JOHNSON UNIT

***Omer Malik & Caroline Laker***

*South London and Maudsley NHS Trust, Lewisham University Hospital, UK*

The Johnson Unit is a Psychiatry Intensive Care Unit based at Lady well unit Lewisham University Hospital.

**Aim**

To establish and evaluate whether a harm reduction strategy delivered by nurses improves the in-patient experience for patients with a dual diagnosis.

The standards against which this audit will be mapped will be derived from Department of Health Policy, Dual diagnosis in mental health inpatient and day hospital settings (DoH, 2006).

**Methodology**

Prospective audit whereby sample size would be determined by the audit time frame.

A screening assessment will be conducted.

The patients will be offered 1:1 time with a nurse (CL) to discuss their substance use issues in relation to their mental health problems.

A motivational interview will be conducted to establish motivation to change.

Patients will be offered information and invited to participate in groups to discuss issues regarding substance misuse/ mental health problems.

They will be linked to relevant addictions services.

Their locality ward and community mental health team will be informed for follow up after discharge.

Patients will be asked to complete a questionnaire at the end of the process to provide feed back.

**Changes/ Outcomes Anticipated**

Currently there is no provision for patients with a dual diagnosis on the Johnson Unit.

It is expected that patient care will be improved because:

Integrated assessments will be delivered to establish links between substance misuse and mental health problems.

Group work and educational material will help to improve understanding / insight into the effects of drugs and alcohol on mental health problems.

Motivational interviewing will address issues of motivation to change and improve the therapeutic relationship between the nurse therapist and the patient.

The provision of a client lead therapeutic activity will improve the therapeutic in-patient experience, help with alleviating boredom and may reduce the number of SUI's.

# P1.15

## MONITORING OF RAPID TRANQUILLISATION

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*Lancashire Care NHS Trust, East Lancashire (Burnley and Blackburn), UK.*

**Background of project and aims**

The Trust requires safe practices to be adopted to ensure well-being of the service when medication is used for Rapid Tranquillisation (RT).

The importance of monitoring has been highlighted by editorials and articles published in British Journal of Psychiatry (BJP) whereby sudden unexpected deaths (BJP 1998) and fatal toxicity of drugs used in the treatment of psychotic illness have been reported.

**Objective**

To evaluate whether the monitoring requirements specified in LCT Rapid Tranquillisation Policy are being met and to increase the quality of care provided to service users receiving RT.

**Project methodology**

Audit tool prepared;
Retrospective randomised data collection from Jan'07 onwards;
Adult wards in East Lancashire (Burnley and Blackburn);
Patients selected following discussion with nurses and by independent review of the prescription charts;
Data analysis;
Results presented to East Lancashire Audit forum.

**Results**

54 episodes of RT were identified on the adult mental health wards in East Lancashire.
Demographics: Males - 59% & Females - 41%.
Only 15% were monitored in accordance with LCT standards.
When haloperidol was administered only 30% were co-administered anticholinergics to prevent side - effects.
19% of the service users were receiving doses in excess of the BNF limit.
Only 27% were on the appropriate level of observation.
31% of service users were given the opportunity to be de-briefed and to document their views in the case notes.

**Impact / anticipated impact on service**

To raise awareness among various professionals regarding the rationale and essence of monitoring in RT. Henceforth a refined monitoring sheet incorporating administration guidance and medication information on RT is being developed.

Training sessions for nursing staff whereby nurse assessment audit of monitoring of vital signs was initiated and nursing staff underwent clinical supervision.

Service users could be better informed about their choices of RT medications, development of patient information leaflet is underway.

# P1.16

## IMPACT OF THE BEDFORDFORDSHIRE CRHT ON THE ADMISSION, DIAGNOSIS & STAY OF THE IN PATIENT OF WAMH IN BEDFORDSHIRE

***Syed Ashraf, Kirti Singh & AG Patel***
*Bedfordshire and Luton Partnership Trust, UK*

**Aims**

To investigate changes to the following before and after the introduction of crisis resolution home treatment:

1. Number of admissions-Total, Formal and Informal;
2. Days of stay –Formal &Informal Patients;
3. Time of admission-Formal &Informal Patients;
4. Diagnostic pattern-Formal & Informal patients

**Method**

Audit and survey based study;
Time frame:Pre CRHT (Dec03-Nov04);
First year Post CRHT (Dec04-Nov05);
Second Year Post CRHT (Dec05-Nov06);
Inclusion Criteria.
All admissions to Bronte and Keats ward (Weller Wing, Bedford Hospital) and in Townsend court in W.A.M.H., within the specified time period.
The study is limited till the end of November 2006.
Exclusion Criteria:
Admission to substance misuse treatment and elderly;
Admission of AOT patients under a new Consultant from April06-Nov06.

**Results**

One year after introduction of the CRHT, total admissions were reduced by 26%, Formal Admissions were reduced by 5%, and Informal admissions by 27%. The duration of stay of formal patients was increased by 9%, and that of informal patients was reduced by 20%. There were 28% less formal admissions during working hours.but formal admissions were increased by 20% outside working hours.Informal admissions during working hours were reduced by 33%, and outside hours were reduced by 22%. Formal dual diagnosis patients were reduced by 70% andinformal patients by 45%.

Two years after introduction of the CRHT, total admissions were reduced by 26%, Formal Admissions were increased by 57%, and Informal admissions by 32%. The duration of stay of formal patients was increased by 10%, and that of informal patients was increased by41%. There were 29% more formal admissions during working hours.but formal admissions were increased by 90% outside working hours.Informal admissions during working hours were reduced by 42%, and outside hours were reduced by 24%. Formal dual diagnosis patients were reduced by 60% and informal patients by 66%.

In the first year,the diagnostic group where there were most admissions,and had the longest stay for both formal and informal patients was F30-39.

In the second year,the diagnostic group where there were most admissions,and had the longest stay for formal F20-29.

In the second year,the diagnostic group where there were most admissions,and had the longest stay for informal patients was F30-39.

**Clinical implications**

The introduction OF CRHT has led to reduction in total admissions, especially Informal admissions and their stay. More number of formal patients were admitted during off working hours, and they stayed longer. Patients with the diagnosis F20-29 and F30-39 were more in number and stayed for a longer duration. Patients with dual diagnosis have decreased in number, however their stay in the hospital has increased.

**Declaration of interest**

None.

## P1.17

### I CAN`T DO THIS ON MY OWN: I AM NO SUPERMAN
### Survey of the current practice of Section 5(2) in a large rotational training scheme in the West Midlands

***Waqqas A. Khokhar, Robert Wall & R. N. C. Mohan***
*Patrick House, Birmingham and Solihull Mental Health NHS Trust, UK*

**Aims and Method**

This survey attempts to understand various physical and therapeutic factors affecting the current practice of Section 5(2) from the trainees` point of view. It also aims to ascertain the level of training and knowledge of the junior doctors to carry out their responsibilities as nominated deputies, adequately. A postal questionnaire was sent to 102 trainees across all psychiatric specialities working as Senior House Officer (SHO) in Birmingham and Solihull.

**Results**

Sixty nine (68%) of the questionnaires were returned. Many discrepancies in the current practice of Section 5(2) were noted, despite practice being informed by legislation. The level of training pertaining to

Section 5(2) was also reported to be particularly poor. Only 17% of the nominators/RMOs made sure that their nominated deputies were adequately trained in this regard. Trainees emphasized on the provision of focussed training, information and clear guidelines from the Trust on matters related to Section 5(2).

**Clinical Implications**

The majority of today's nominated deputies are Section 12 approved doctors of future. They will have an active role in implementation of mental health legislations. An early exposure to appropriate training with particular emphasis on the importance of team work would make it easier for the trainees to embrace these legislative challenges adequately.

## P1.18

## ENABLING MENTAL HEALTH PRACTITIONERS TO PROVIDE PSYCHOSOCIAL INTERVENTIONS THROUGH A STEPPED CARE APPROACH

***John Butler***
*Bedfordshire & Luton Partnership NHS Trust*

The application of evidenced-based psychosocial interventions by mental health teams is both highly recommended and a requirement for practice.

Psychosocial Interventions are most usually focused on people who experience a serious mental illness, which typically include: a structured collaborative approach; assessment based upon a psychosocial framework; formulation-driven treatment and care; meaningful outcomes-based assessment; concordance skills interventions; structured problem-solving; cognitive-behavioural intervention; psychological management of symptoms (such as coping strategy enhancement); family intervention; structured relapse prevention planning; and, effective case management.

There is a growing evidence base for psychosocial interventions which are increasingly associated with positive long-term outcomes.

Mental health practitioners need greater access to educational opportunities and skilled workplace-based supervision in becoming better equipped with knowledge and skills in responding effectively to this developing trend in service delivery.

As a joint venture between the local Trust and University (now the University of Bedfordshire), a module in Evidence-based Psychosocial Interventions was developed and offered as part of a BA(Hons.) Health Care programme from Autumn 2001.

Subsequently, an in-house PSI course was developed, which is closely based upon the accredited module. This programme has now been offered on two occasions (from Feb 2006 & Feb 2007), being delivered over a 4-month period by a course team of specialist practitioners: Consultant Nurse; Nurse CBT Therapist(s); and, four Clinical Psychologists.

Monthly workplace-based group clinical supervision from an advanced practitioner in psychosocial / cognitive-behavioural intervention (who will usually be the Team's Clinical Psychologist, a nurse therapist or the Consultant Nurse) is a course requirement and, for the most recent course, each participant and their Team Manager were required to sign a course contact in reinforcing commitment to the course and the clinical practice of skills throughout and following the programme.

This conference poster presentation will outline the work of the Trust's PSI Training Centre, describing this local PSI Initiative in greater detail and sharing the preliminary outcomes for clients of this group of PSI practitioners.

## P1.19

## ASSESSING THE QUALITY OF OUTPATIENT LETTERS TO GPS

***Arif Ahmed, Daniel Holyoake, & Milind Karale***
*Weller Wing, Bedford Hospital, UK*

**Aim**

To assess the quality of the follow up outpatient letters from the psychiatric services to the general practitioners.

**Purpose of the Audit**

A quick and reliable feedback to the general practitioner following an outpatient assessment is essential for providing safe, effective and continuous service to the patients. Quality of the communication between the psychiatrist and the general practitioner reflects the quality of care provided to the patient (Prasher 1992). The idea of the audit is to assess whether the general practitioners are getting the relevant information and within a reasonable time.

**Criteria**

All follow up outpatient letters should have:

1. Clear mention of the medications prescribed or changed;
2. Diagnosis of the condition or at least a provisional diagnosis;
3. Documentation of mental state examination.

All letters should be dispatched to the general practitioners within 2 weeks of the outpatient assessment.

**Methodology**

We screened 90 outpatient letter from the three working age Community Mental Health Teams based at Weller Wing. The letters were grouped into SHO, middle grade and consultant for comparison.

**Findings**

Phase 1 findings - 98% of letters contained clear description of current medication. Mention of MSE was the most poorly achieved criteria (61%). Diagnosis was clearly documented in 66%of the letters. SHO letters scored the most highly, achieving 83% overall.

Phase 2 findings- The documentation of mental state improved to 75% and the diagnosis improved to 91%. The documentation of the medication reduced to 90%.

**Conclusion**

There was an overall improvement in the quality of letters across all the clinical grades. One of the teams significantly changed the practice where the documentation of diagnosis increased from 7% to 91%.

# P1.20

## THE DEVELOPMENT COMMUNITY TREATMENT AND FIRST OUTCOMES IN SLOVENJA

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In 2005, a psychiatric team from Slovenia spent some time visiting Community Psychiatric Teams in Bedfordshire.

Since that time, the team has returned to Ljubljana and began a pilot project to develop an assertive outreach team in Ljubljana.

This involved developing work with patients in their homes and developing appropriate documentation for case management.

The results have been encouraging.

This poster will describe the development of this pilot service and its first results.

# PRIMARY CARE

## P2.1

### IMPLEMENTING COLLABORATIVE CARE IN ROUTINE PRACTICE: AUDIT OF A NEW SERVICE

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*[4]University of Manchester, UK*

**Introduction**
"Collaborative care" is an evidence-based organizational intervention which shows considerable promise in improving the outcomes for depression in primary care. It utilizes a case manager to deliver brief psychological therapy and medication management care and liaise between GP, specialist and patient.
**Aim**
To measure the outcomes of patients referred to a new primary mental health care service that is implementing collaborative care in routine practice.
**Methods**
A retrospective audit of data from 187 clinical case notes and log books was carried out. This included all cases referred during a 6 month period. Demographic details, psychotropic medication, substance misuse, time intervals in the pathway of care, level and amount of input, and data from routine monitoring with validated rating scales of PHQ-9 and GAD-7 were gathered.
**Results**
All cases were seen between 0 and 71 days with a mean waiting time of 12 days. 39.6% patients were documented to be taking antidepressant medications. The mean baseline PHQ-9 and GAD-7 was 16.5 and 13.5 respectively. The mean improvement in the PHQ-9 and GAD-7 scores were 9 and 7.5 respectively. These scores are comparable with results achieved in the intervention group in the first UK randomised controlled trial (in press).
**Clinical Implications**
The results show that collaborative care is a potentially effective and feasible organisational intervention for improving depression treatment in UK primary care.

## P2.2

### THE DYNAMICS OF STRESS AND CHANGES IN THE WORKING CONDITIONS OF GENERAL PRACTITIONERS (GPS) IN CROATIA

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***Key words:*** *GPs - health care reform - PHC - privatisation - stress - working conditions*

**Aims**
To explore the effects of the primary health care reforms in Croatia from the point of view of work generated stress and job satisfaction of GPs in Croatia; to determine whether the change in working conditions related to the privatisation of Primary Health Care increased stress among GPs and to obtain insight into the most prominent stressors.
**Methods**
Two questionnaires (the Holmes and Rache social readjustment questionnaire and a special test for investigating stressors derived by the "emic" method) were used.
**Subjects**
120 GPs with private practices (response rate of 75%) and 90 hospital doctors (response rate 92%).

**Results**

2/3 of participants in both subgroups were females. In both subgroups, around 1/2 of participants were up to 45 years old. Significant findings were that 30.3% of GPs reported progress having been made regarding their working place and finances, 78.8% reported that their work responsibilities had increased and 57.6% reported that they had changed their working hours and work conditions. 24.2% of GP s reported a reduction in the time spent with their families, 6.1% stated that their children had altered their behaviour in a negative manner, 26.3% of GPs stated that their partners had altered their behaviour for the better and only 16.2% took time off for sickness in the last three years. The most common stressors found were disruption to family life due to consultation with patients after working hours (46.9% cases) and feeling overloaded with new administrative commitments (68.4% cases).

**Conclusion**

Privatisation of PHC produced stress among GPs without severe negative consequences to the private lives and health of GPs.

## P2.3

## LIFE HABITS OF GENERAL PRACTITIONERS DURING THE PRIVATISATION OF PRIMARY HEALTH CARE

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***Key words:*** *GPs - hospital doctors - life habits - drinking - smoking - exercise - body mass*

A survey was conducted during the year 2000, of 120 GPs with private practices (response rate of 75%) and of 90 hospital doctors (response rate 92%) to explore differences in the life habits of GPs compared to the life habits of hospital doctors. No significant difference was found in the life habits of the two groups, except that almost all hospital doctors stated that they had at least a one close confidential friend while only 2/3 of GPs did so. Although 2/3 of doctors from both groups consider themselves "in good health", more than half of them stated that they were an inappropriate weight for their height and most of them did not exercise regularly. More than 1/3 always drank more than five alcoholic drinks a week, and about 1/4 always smoked more than half a pack of cigarettes a day. Half of the GPs and more than 2/3 of the hospital doctors consider that they do not have "an income adequate to meet basic expenses".

## P2.4

## ANALYSIS OF THE ADHERENCE TO NICE GUIDELINES IN THE MANAGEMENT OF DEPRESSION AND PREVALENCE OF COMORBIDITY IN PRIMARY CARE IN MANCHESTER

***Angie Hayes, Efren G Sanchez & Karim S Rajput***

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**Aims**

It has long been recognised that depression is a difficult condition to manage (NICE, 2007) and the presence of comorbid factors is well known. This project aims to assess the management of depression in primary care, in terms of both pharmacological and non-pharmacological interventions offered.

**Method**

118 patients currently stable on SSRIs for ≥12 months were selected by systematic sampling from a cohort of 179, at a medium-sized general practice in Manchester, UK. Patients were invited for interview, during which a PHQ9 questionnaire was completed to assess current symptoms of depression and a further 8 questions asked to elicit knowledge of medication and of psychological treatments. Retrospective data was also collected from patient notes to record any relevant history, concurrent illness and whether baseline symptoms had been documented prior to starting medication.

**Summary & Discussions**

40% patients responded, of which only 32% could remember being warned of possible side effects and only 66% were followed up within the recommended 2 weeks from starting antidepressant medication. 96% had a concurrent chronic physical illness, 51% of whom had a musculoskeletal condition such as

osteoarthritis or chronic low back pain. Only 6 % received CBT, despite NICE recommending this be considered for all patients with depression, regardless of severity. Worryingly 30% patients had no documentation of specific symptoms recorded prior to treatment for depression. In these cases the correct management pathway according to NICE may not be being followed. We suggest that NICE guidance be followed more strictly. PHQ9 should be routinely used to identify the presence and severity of depression prior to commencement of antidepressants. For patients who were not able to take in the information initially, it may be useful to remind them about the side effects of medication at subsequent appointments to help improve retention of that information.

# P2.5

## AUDIT OF ADHERENCE TO THE NICE GUIDELINES FOR THE USE OF HYPNOTIC AGENTS AT MANCHESTER ROYAL INFIRMARY (EDALE UNIT)

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**Aims**

We conducted an audit of hypnotic use on inpatient psychiatric wards Edale Unit of Manchester Royal Infirmary. The audit was conducted against NICE guidelines on the use of zopiclone, zolpidem and zaleplon for short term management of insomnia (NICE 2004). The aims of the audit were to identify the prevalence of insomnia on inpatient wards, find out how insomnia is managed, identify whether hypnotics are used according to NICE guidelines and establish whether details of insomnia and its management are properly documented in the case notes.

**Method**

We intended to audit 60 patients that discharged from the Edale Unit from 01/09/06, however only 55 case notes were included. A pro-forma was designed to collect information using NICE guidelines. The information was collected by reviewing all the available case notes retrospectively.

**Results & Discussions**

Hypnotics were prescribed in 27% (15/55) of these patients hospital, however only 7% (4/55) had a thorough sleep history. None of the patients were given non pharmacological advice prior to commencement of medication, as is strongly advised in the NICE guidelines.

Counselling prior to starting hypnotics, including issues such as a short licensed duration of use, as well as risks of dependence, tolerance and withdrawal symptoms are discussed with patients, was not documented for any patient. Zopiclone was the most commonly prescribed hypnotic drug comprising 87% of all prescriptions; the range of doses of Zopiclone used was 3.75mg – 7.5mg. Despite NICE guidance, the cheapest medication was not prescribed.

Hypnotics were not withdrawn prior to discharge in 50%, and 25% of those on regular medications were taking them for longer than the licensed duration (28days).

NICE guidelines were in the most part poorly followed, especially aspects such as using the cheapest hypnotic medication and the use of non-pharmacological treatment.

# P2.6

## PRESCRIBING OF HYPNOTICS AT MANCHESTER ROYAL INFIRMARY. A COMPARISON BETWEEN PSYCHIATRY AND NON-PSYCHIATRY WARDS

***Zahra Rajput***
*University College London, UK.*

**Introduction**

NICE (2004) guidelines were introduced to help doctors to make decisions on appropriate and safe prescribing of hypnotics. Doctors are encouraged to adhere to such guidance where relevant.

**Aims**

This abstract aims to compare prescribing habits on psychiatric and non-psychiatric wards at a busy teaching hospital in Manchester and discuss the findings.

**Method**

Audits of hypnotic use and adherence to NICE guidelines on the Edale (Psychiatric) Unit and Medical and Surgical Wards at Manchester Royal Infirmary were analysed and compared.

**Results/Summary**

The incidence of hypnotic prescribing was identical (27%). Documented insomnia in the non-psychiatry group was 10% and the presence of a detailed sleep history in the psychiatry group was 7%.

In both groups, documentation in case notes of patients receiving non-pharmacological measures prior to commencement of medication was absent. Documentation of counselling prior to starting hypnotics was poor, with little evidence in case notes that issues such as short term use, risks of dependence, tolerance and withdrawal symptoms were discussed.

Zopiclone was most commonly used in both audits (87-95%) The dose range was higher on the non-psychiatry wards: 3.75mg-15mg, compared with 3.75-7.5mg. There were no incidences of above BNF dose prescribing, however there were cases in the psychiatry group of hypnotic use of over 4 weeks.

Hypnotics were withdrawn prior to discharge in 50% of cases by psychiatrists, but only in 20% by non-psychiatrists. Interestingly psychotropic medication use on the non-psychiatry wards was over 50%.

**Discussion**

The prescribing of hypnotics according to NICE guidance is generally very poor. This could be due to poor awareness and consequent non-adherence to NICE guidance. This has serious implications on the medical profession and patients alike.

NICE guidance needs to be better highlighted to all prescribers. Documentation must improve urgently, as lack of it leaves doctors vulnerable to criticism and litigation.

# DEVELOPMENT OF PSYCHOTIC ILLNESS

## P3.1

### SCHIZOPHRENIA IN FAMILIES – SOME CHARACTERISTICS OF PARENTS AND THEIR OFFSPRING WITH SCHIZOPHRENIA

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**Background**

It is known that schizophrenia aggregates strongly in families. First degree relatives of schizophrenic patients have a 5 to 10 times higher risk for schizophrenia than people with no schizophrenia in their family.

The etiology of schizophrenia is not yet completely known. Most researchers agree that both genetic and environmental factors and their interactions are important in the etiology and Phenotypic expression of the disease. Anticipation, decreasing age of onset and increasing disease severity, has been confirmed in many epidemiological studies of schizophrenia. The phenomenon has its molecular basis in trinucleotide repeat expansions and it has been proved for many neurodegenerative diseases, but not yet for schizophrenia.

**Aim**

The aim of our study is to evaluate the epidemiological phenomenon of anticipation in our sample of schizophrenic parents and their children. All of them were treated at the Ljubljana Psychiatric Hospital.

**Methods**

Our sample consists of 36 parent-offspring pairs of schizophrenic patients. The demographic characteristics of the sample were described (their sex and age in the year 2000). The groups (parents and offspring) were compared by some of their social characteristics (marital state, level of education, employment, number of children), age at disease onset and some indirect indicators of disease severity (total number of days in hospital during the first five years of treatment, total number of hospitalizations).

The data was collected from the disease files that are kept in the archive of the Ljubljana Psychiatric Hospital.

The patients included in our sample were diagnostically classified as schizophrenic or schizoaffective. The ICD 10 diagnostic criteria were used.

**Results**

Our study confirmed earlier age of onset in the offspring group (OG) .The mean age of onset in the offspring group was 23.5 years and 39.6 years in the parents group. The age at first hospital admission was used as an indicator of the disease onset because it is the most reliable and is used as an indicator of disease onset in the literature. Comparisons were also made separately for the mother–son, mother–daughter, father–son and father-daughter pairs because it is known that schizophrenia usually starts earlier in men that in women.

It cannot be undoubtedly claimed that disease severity was increased in the second generation, but that could be assumed by the following indices: higher mean total number of days of hospitalization in the first five years of treatment in the OG (OG=223, PG =161), higher mean number of hospitalizations at the Ljubljana Psychiatric Hospital in the first five years of treatment for the OG (OG=3.06, PG=2.31), almost equal mean total number of hospitalizations in spite of a much shorter duration of treatment for the OG (OG=7.27, PG= 7.51). The OG had a shorter working years number, they had less children. The mean level of education was higher in the OG.

**Conclusion**

The epidemiologically confirmed anticipation in our sample could be the basis of further genetic studies of the etiology of schizophrenia.

# P3.2

## PATTERNS IN THE DEVELOPMENT OF PSYCHOTIC SYMPTOMS AFTER TRAUMA IMPLICATIONS FOR EARLY INTERVENTION SERVICES

***Mark Agius[1], Harriet Pepper[2], Sah Moni[3], Sajeeva Jayalath[3] & Rashid Zaman[1]***
*[1]BCMHR-CU, [2]Magdalene College, Cambridge University, [3]Weller Wing, Bedford Hospital, UK*

**Background**

It has been observed that in some cases, psychotic symptoms may develop after traumatic experiences. This has been well documented in Wartime situations, while there is much documentation that Childhood Abuse is linked with psychosis in later life. Much more common manifestations of psycho-trauma are PTSD, and it is also a common observation that the symptoms of 'Borderline Personality Disorder ' are often linked with a past history of childhood trauma.

We hypothesise that the development of psychotic symptoms related to trauma may occur in a different pattern than the development of psychosis of neuro-developmental origin [schizophrenia], and that this may be explained by different changes in brain functioning and anatomy, although with a common result.

**Methods**

We present a series of Case Vigniettes, all of whom have developed psychotic symptoms; Three cases have experiences major trauma, in Early Adulthood, Two cases have experienced a major trauma related to a war situation, and two cases, for comparison, have developed psychotic illness of a neuro-developmental type [schizophrenia].

**Findings**

As expected, the cases of neuro-developmental psychosis developed psychosis over a long prodromal period, in which symptoms developed from non-specific depression and anxiety to a gradual increase of positive psychotic symptoms over time, until full psychosis developed.

The five cases where psycho-trauma occurred in adulthood [including the two wartime cases and the three other cases] showed sudden development of symptoms at the time of the trauma including PTSD and borderline symptoms which developed immediately after the trauma. The psychotic symptoms developed, also suddenly, some time later, after a subsequent episode of psycho-trauma.

**Conclusion**

The different patterns of development of psychotic symptoms in cases of psycho-trauma compared to cases of neuro-developmental psychosis suggest different mechanisms of causation of the psychotic symptoms. Nonetheless, in all these cases, a full blown psychotic illness may result. In cases of psycho-trauma, this illness may continue to be accompanied by ongoing symptoms of PTSD and Borderline features, making these patients difficult to treat. These patients should not, however, be neglected by services for developing psychosis.

# P3.3

## EARLY INTERVENTION IN PSYCHOSIS- CARERS GROUP

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*Chester- Early Intervention in Psychosis Team (Cheshire and Wirral Partnership NHS Foundation Trust), UK*

The Early Intervention in Psychosis team at Chester was set up in 2004. As a part of comprehensive service delivery, we felt a need to set up a carers' group to (1) Give information about the services and treatments (2) To get their views on what is needed for them and their relatives (service users). (3) To provide support by sharing their experiences of mental health issues encountered with in the family setting.

We therefore set up a monthly evening group of carers and kept a systematic record of issues discussed and shared in the groups. The carers found the presentation about early intervention was 'very useful'. They felt reassured and positive about getting involved with the services and felt a need of ongoing involvement through this group.

The poster will share our experience of setting the group in Chester.

# METABOLIC SYNDROME AND MENTAL ILLNESS

## P4.1

### CASE REPORT ON A PATIENT WITH METABOLIC SYNDROME, HYPERPROLACTINAEMIA, AND AN ARACHNOID CYST

***Catherine Louise Murphy, Mark Agius & Rashid Zaman***
*BCMHR-CU, UK*

***Key words:*** *Metabolic syndrome - Hyperprolactinaemia - Borderline personality disorder - antipsychotics*

**Introduction**

The increased mortality in individuals taking antipsychotics compared to those not taking antipsychotics may in part be due to the association between antipsychotics and 'metabolic syndrome'. Metabolic syndrome occurs when a person has three or more cardiovascular risk factors such as diabetes mellitus, hyperlipidaemia and abdominal obesity.

**Case Report**

We present a case of a young female with features of metabolic syndrome who has been prescribed antipsychotics. In this case it is not entirely clear if these features are due to her medication or due to other factors.

This patient, who is obese, exhibited signs of both metabolic syndrome and idiopathic hyperprolactinaemia.

She also suffers from type 2 diabetes, and in the past has suffered from childhood epilepsy, a large borderline cystadenoma requiring salpingo-oophorectomy, and migraine.

She has a strong family history of Diabetes Mellitus and was overweight as a child. It is therefore difficult to associate these problems with her antipsychotic use.

An MRI scan was carried out in February 2007. It showed no abnormalities of the pituitary but did show an arachnoid cyst in the posterior fossa, which the neurologists thought to have no role in her hyperprolactinaemia.

She has been treated with Risperidone 5mg, Fluoxetine 40mg, Metformin 2200mg daily and Cabergoline 500mcg twice weekly. The hyperprolactinaemia antedated her treatment with Respiridone.

**Conclusions**

It is likely that antipsychotics play a role in her medical presentation but do not tell the full story. It is worth noting that metabolic syndrome in a patient taking antipsychotic medication may not always be due to the antipsychotic medication. In the future psychosis may be seen as one of the symptoms of Syndrome X and not merely metabolic syndrome as a side effect of antipsychotic medication. It is important to understand and monitor the medical conditions of people taking psychiatric medication. We have changed her antipsychotic medication to Aripiprazole, in view of the diabetes, the hyperprolactinaemia and the obesity.

## P4.2

### LIPID LEVEL CHANGES AND CARDIOVASCULAR RISK IN VETERANS WITH CHRONIC PTSD

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***Key words:*** *chronic PTSD - atherosclerosis - serum lipids - cardiovascular risks - veterans - Bosnia and Herzegovina*

**Background**

Our clinical experience in working with survivors of repetitive and prolonged exposure to traumatic events who are now suffering from chronic PTSD, lead us to note frequent changes in laboratory results in terms of alterations of serum lipids that are associated with an increased risk of cardiovascular disorders. This is consistent with another clinical observation of increased cardiovascular morbidity in this group of patients, and also is congruent with published reports in the literature.

**Subjects and methods**

The subjects were 100 adult men, veterans with combat exposure, who met the inclusion criteria for the study and who agreed to sign the informed consent for the participation in this study. The subjects were

divided in two groups, each comprising of 50 subjects. The experimental group consisted of 50 adult men, age 40-50, veterans with combat exposure who met the criteria for the diagnosis of chronic PTSD according to ICD-10. The control group consisted of 50 adult men, age 40-50, veterans with combat exposure who did not meet the criteria for the diagnosis of chronic PTSD according to ICD-10. The groups were homogenized according to other factors influencing serum lipid levels (BMI, smoking, medical conditions, and medications affecting lipid levels). The subjects were assessed with the use of the following standardized psychometric instruments: MINI, Folkman-Lazarus Coping Strategies Questionnaire, BSI, IES-90 R, Mississippi Questionnaire; MANSA; Life Stressor List and a socio-demographic questionnaire: Blood lipid levels were determined. The risk factors were calculated from the concentrations of serum lipids and the information on smoking status and systolic blood pressure.

**Results**

Concentration of serum lipids and risk factors for arteriosclerosis and coronary disease were significantly higher in the experimental group compared with the control group. Scores for all three PTSD symptom clusters were significantly correlated with concentration of serum lipids and risk factors. Frequency of traumatic events during the war was correlated with the concentration of serum lipids and risk factors as well as the per capita monthly family income. Adaptive coping strategies are significantly negatively correlated with concentrations of serum lipids and risk factors, while maladaptive coping strategies are significantly positively correlated with those parameters.

**Conclusions**

The results of this study provide further evidence for the correlation of chronic PTSD and the increased values of serum lipids and risk factors for atherosclerosis and coronary disease. The results also indicate the importance of factors of posttraumatic environment and coping strategies in influencing the occurrence and persistence of PTSD.

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# P4.3

## PHYSICAL HEALTH MONITORING IN PATIENTS ON ATYPICAL ANTIPSYCHOTICS

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**Background**

Individuals with serious mental illnesses (SMI) have a shorter life expectancy and a greater vulnerability to several physical illnesses than the general population. Physical health monitoring with a view to promote early detection and intervention of common serious risk factors associated with SMI and medications used in its treatment is therefore important.

**Aims**

To look at the effects of atypical antipsychotics on the BMI (Body Mass Index), blood pressure and laboratory findings such as fasting glucose, fasting lipid profile and prolactin.

**Method**

40 patients between the period May and November 2006 who were currently on atypical antipsychotics with a diagnosis of schizophrenia spectrum disorders or Bipolar affective disorder were randomly selected.

Baseline and follow up investigations such as BMI, blood pressure, fasting glucose, fasting lipids, and prolactin levels were noted and if not found were done at the time of review and compared with standard normal values.

**Study results**

The study included 40 Patients who satisfied the inclusion criteria. 25% had 3 or more risk factors, 27.5% had 2 risk factors and 20% had 1 risk factor for the metabolic syndrome. 40% were overweight, 35% were obese and 38% had raised prolactin levels.

**Recommendations**

We recommended a uniform protocol for baseline and follow up monitoring of Weight /BMI, Waist circumference, Blood pressure, Plasma glucose, Lipids and Prolactin.

# MEDICATION IN PSYCHOSIS

## P5.1

### CYTOCHROME P450 INTERACTIONS AND CONSEQUENCES

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**Aim**

To determine the prevalence of regular and PRN (pro re nata) drug prescription by class, the potentially important cytochrome 2D6 and 3A4 interactions and their consequences on cardiac, liver function and prognosis

**Method**

Case record forms with drugs prescribed, liver function, ECG results and prognosis from CPA (Care Program Approach) reports were completed for 60 patients in Ravenswood House between February and May 2007. Where patients were taking one or more drugs interacting with cytochrome 2D6 or 3A4, the potential for clinically significant interaction was assessed based on Cytochrome-substrate chart in Psychotropic Drug Directory (2005).

**Results**

Total number of prescription was 661 (Mean 9.4 per patient). 395 (59.7%) was regular prescription (Mean 5.6 regular prescription per patient). 81 out of the 266 PRN prescriptions (30.4%) was used in the last week. 45 patients (64.2%) had used at least one PRN prescription in the last week. Anti-psychotics were the most commonly prescribed regular medications (19.7% of total regular medications) and sedatives/ hypnotics the PRN medications (27.2% of total PRN medications). There were a total of 47 potentially clinically significant drug interactions. Three-quarters (16 out of 22) of the cytochrome 2D6 and more than half (17 out of 25) of the cytochrome 3A4 drug interactions were between regular and PRN medications. 14 out of the 24 with transient increase in serum alkaline phosphatase had significant drug-cytochrome interaction. Three out of the five (60%) with QTc changes on ECG had potentially significant cytochrome-drug interaction. Six (42.85%) incidents of increase in psychotropic medications, seven (50%) of change and two (33.33%) of decrease in psychotropic medications were in patients with potentially clinically significant cytochrome-drug interactions.

**Conclusion**

Clinicians whilst ensuring therapeutic efficacy should actively monitor for cytochrome based interactions particularly for patients on polypharmacy.

## P5.2

### THE USE OF ARIPIPRAZOLE IN ORDER TO AUGMENT THE EFFECT OF CLOZAPINE

***Catherine Louise Murphy, Alpha Win, Mark Agius & Rashid Zaman***
*BCMHR-CU, UK*

**Rationale**

Since the introduction of aripiprazole, a number of reports have described the use of aripiprazole to augment the use of clozapine in treatment-resistant schizophrenia, with generally good result (1, 2, 4, 6, 7). However, none of the papers in the present literature discuss a sufficient number of cases to enable clear conclusions to be drawn. We wish to add to this growing literature by looking specifically at this issue of aripiprazole augmentation of clozapine and olanzapine.

**Method**

We present a series of four cases, studied in a 'real life' rather than in a research situation. The augmentation strategy used included aripiprazole in combination with clozapine in three cases and with olanzapine in one case. All patients had a diagnosis of schizophrenia or schizoaffective disorder.

**Results**

The results we found in these cases were mixed, as has been found in other recent studies. In one case of aripiprazole and clozapine combined therapy, the aripiprazole was stopped when the patient improved and the patient wanted to reduce his pharmaceutical intake. In another case, the aripiprazole was

stopped because of lack of improvement in the patient's symptomatology. In the remaining two cases, the use of this combination of drugs is ongoing and proving effective. In one of the cases the combination of drugs being used are 20mg olanzapine and aripiprazole 5mg. This goes against case reports suggesting that combinations of non-clozapine atypicals and aripiprazole worsen prognosis.

**Conclusion**

We here used olanzapine [20mg] combined with aripiprazole [5mg] with encouraging results [at least initially]. It should be remembered that olanzapine is a drug with a molecular structure similar to clozapine. Full outcome to follow.

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# BIPOLAR DISORDER

## P6.1

### UNDER-DIAGNOSIS OF BIPOLAR AFFECTIVE DISORDER IN A BEDFORD CMHT

***Mark Agius, Catherine Louise Murphy & Rashid Zaman***
*BCMHR-CU, UK*

**Introduction**

It is known that bipolar disorder is frequently misdiagnosed or diagnosed late.

Misdiagnosis of Bipolar Disorder can have serious implications for prognosis and treatment of this condition.

**Method**

Using an excel database, an audit of the diagnoses of all patients in a CMHT in Bedford was carried out.

It was noted that few patients were diagnosed as having bipolar II disorder, while there was a large number of Bipolar I patients, and a larger number of patients with recurrent depressive disorder, mixed anxiety and depression, unipolar depression, and psychotic depression.

All patients with recurrent depressive disorder, anxiety and depression, unipolar depression and psychotic depression are being reassessed in the outpatient clinic, using a full longitudinal history of their mood changes, a family history, and, when these two tests are positive, the structured mood disorder questionnaire.

The new diagnoses are recorded in the Excel Database.

**Results**

This poster represents work in progress. Already, increased awareness of bipolar disorder is leading to a more frequent diagnosis or re-diagnosis of Bipolar II disorder, as well as a consequent change in the proportions of each diagnosis in the sample.

**Discussion**

The frequent misdiagnosis of Bipolar II disorder frequently leads to the treatment of these patients with anti-depressants only.

This leads to the possibility of patients becoming elated in mood, or going into mixed states, which can lead to increased suicidality.

**Conclusion**

Appropriate diagnosis of bipolar II disorder requires skills at present found in secondary care. Such patients should therefore be referred to secondary care. Both Primary and Secondary care should be more aware of this diagnosis and its consequences.

## P6.2

### BIPOLAR DISORDER ASSOCIATED WITH PARANEOPLASTIC CEREBELLAR DEGENERATION: A CASE STUDY

***Catherine F Slattery[1], Mark Agius[2] & Rashid Zaman[2]***
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**Background**

Paraneoplastic cerebellar degeneration (PCD) is a rare disorder, presenting with severe cerebellar dysfunction. Recent observations show that in addition to motor deficits, cognitive and behavioural changes can be associated with cerebellar damage. The cerebellar cognitive affective syndrome (CCAS) describes affective disturbances and impairments in executive function, spatial cognition and language. We describe a patient who developed a psychiatric disorder following PCD.

**Case Description**

A 19-year-old female presented with subacute ataxia, dysarthria and nystagmus. She was subsequently diagnosed with Hodgkin's lymphoma and achieved complete remission following chemotherapy. Over the next seven years she experienced recurrent episodes of altered mood. Her depressive symptoms included low mood, crying spells, irritability, apathy, lack of energy and early waking. There were also periods when she felt "high", harboured unrealistic optimism, had reduced attention, increased her alcohol intake

and was described as being "reckless" by her family. She was diagnosed with bipolar affective disorder and eventually stabilised on imipramine and lithium.

**Discussion**

This presentation appears to describe a case of CCAS, in which the affective component is bipolar affective disorder, type II. The history of clear episodes of depressed and elated moods suggests a definite diagnosis of bipolar illness, rather than a non-specific reaction to the demoralisation caused by chronic ill heath. This leads us to suppose that the psychiatric findings are a direct result of the neuropathology, emphasizing the role of the cerebellum in affective illness. It should be noted that a recent review article included depression, mood instability and psychosis in the possible psychiatric consequences of CCAS, but bipolar disorder per se appears to be a more unusual variant.

**Conclusion**

This presentation adds to the existing literature suggesting a cerebellar role in the modulation of emotion, and emphasizes the importance of addressing psychiatric sequelae in the treatment and rehabilitation of patients with paraneoplastic cerebellar degeneration.

## P6.3

## UTILIZATION OF COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM) AMONG OLDER ADULTS WITH SERIOUS MOOD DISORDERS

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**Aims**

There has been a rapid expansion of consumer's use of complementary and alternative medicine (CAM) in the United States, including fairly extensive use in populations with mental disorders, who are often taking prescription psychotropic compounds. The issue of CAM use among older adults with psychiatric illness is clinically important as it is known that some alternative compounds may worsen or precipitate psychiatric symptoms, however little data has been published on CAM use in older individuals with mood disorders.

**Methods**

This is a cross-sectional analysis of CAM use in 50 older adults with bipolar disorder and 50 older adults with major depression which evaluated factual knowledge of CAM, individual perspective of efficacy and safety of CAM, patterns of CAM use and discussion of CAM with health care providers.

**Results**

Approximately 30% of older individuals with serious mood disorders use CAM. Over 40% of older adults believe that CAM is FDA-regulated and 14-20% prefer to take CAM compared to physician-prescribed psychotropic medications. Use of CAM is more common among older adults with bipolar disorder (nearly 50%) compared to older adults with major depression (less than 20%). The majority of older adults with serious mood disorders (74%) have not discussed use of CAM with their treating physicians.

**Conclusions**

CAM is widely used by older adults with serious mood disorders, particularly among older adults with bipolar disorder. Most individuals do not discuss use of CAM with their physicians and nearly one in two individuals incorrectly believes that CAM is FDA-regulated. Given the common use of CAM in geriatric populations with mood disorders, clinicians need to assess for CAM use in older adults with mood disorders.

# P6.4

## ARIPIPRAZOLE THERAPY IN OLDER ADULTS WITH BIPOLAR DISORDER

***Martha Sajatovic, Nicoleta Coconcea, Rosalinda V. Ignacio, Frederic C. Blow, Robert W. Hays, Kristin A. Cassidy & William J. Meyer***
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**Objective**
Bipolar disorder in older adult populations has gained increasing attention due to the growing proportion of elderly in the U.S. and worldwide. A continuing unmet need is the identification of agents that are generally well tolerated and effective in later life bipolar disorder. Aripiprazole is an atypical antipsychotic compound which is FDA approved for the treatment of bipolar mania and for the long-term treatment of bipolar disorder. This is an open-label prospective trial of aripiprazole therapy in 20 older adult patients with bipolar disorder.
**Methods**
Older adults with bipolar disorder I who were currently sub-optimally responsive to their treatments received 12 weeks of open- label aripiprazole added on to existing mood stabilizer medication treatment. Aripiprazole was initiated at 5 mg daily and increased as tolerated. Efficacy outcomes included psychopathology scores (Young Mania Rating Scale/YMRS), Hamilton Depression Scale /HAM-D), extrapyramidal symptom assessments, and level of functioning measurement (Global Assessment Scale /GAS).
**Results**
Twenty older adults (mean age 59.6 years, range 50-83 years) received aripiprazole therapy. The majority of individuals had bipolar depression. On preliminary analysis, individuals had significant reductions in depression scores (Hamilton Depression Rating Scale/HAM-D base =13.4, HAM-D end (LOCF) = 7.5, p<. 001), as well as mania scores (Young Mania Rating Scale/YMRS base= 8.4, YMRS end (LOCF)= 5.6, p<. 03). There were also significant improvements in functional status as measured by the Global Assessment Scale/GAS (p= .001) Mean daily dose of aripiprazole was 10.26 mg/day SD ± 4.9, range 5-20 mg/day. Overall, aripiprazole was well tolerated in this older adult population.
**Conclusion**
Aripiprazole appears efficacious and well tolerated in older adults with bipolar disorder. Of particular note, aripiprazole therapy was associated with improvements in bipolar depression in this older population. However, larger, controlled trials are needed to confirm these preliminary findings.

This study was supported by funding from Bristol-Myers Squibb.
Disclosure information: Dr Sajatovic has received grant support from Abbott Laboratories and Bristol Myers Squibb, is a consultant to AstraZeneca and GlaxoSmith Kline and is on the Speakers Bureau for AstraZeneca.

# P6.5

## AUDIT OF CURRENT CLINICAL PRACTICE IN MANAGING PATIENTS WITH BIPOLAR DISORDER

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**Aims and Method**
We live in an era of evidence based medicine. But how often and how many of us practise EBM? The Re Audit on Management of Patients with Bipolar Affective Disorder in both inpatient and community setting in Lancashirecare NHS Trust, Blackpool, was designed with an aim to address this issue. The audit, which is a follow up on a similar Audit done in July 2006 (which looked at the practice before the NICE guidelines on BPAD were published) measured the extent of conformity to NICE guidelines on management of BPAD (published July 2006).
This was a retrospective audit looking at a six months period (Jan 2007 to June 2007) of 40 case records of service users with a diagnosis of Bipolar Affective Disorder.
A proforma was set with the help of Audit Department and percentage of adherence to NICE guidelines

on various areas such as initiation of medication, discussion of side effects, use of antidepressants, second opinion, monitoring of physical health and side effects, etc was calculated. This was then compared to the findings of the original audit.

**Results**

The audit showed that following recommendations from the previous audit there was a significant improvement in the percentage of adherence to NICE guidelines, the monitoring increasing by 30%, continuation of routine antidepressants reducing by 15%, etc. The audit also identified important shortcomings in documentation (37.5%) and annual physical health checkups (40%) for which recommendations were made with a plan to re-audit (prospective) for a period of one year.

**Clinical Implications**

Continuous monitoring and feedback can increase clinical effectiveness and improve service delivery based on best evidence available.

## P6.6

## AUDIT ON PHYSICAL MONITORING IN CLIENTS PRESCRIBED MOOD STABILIZERS

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*Leeds Mental Health Trust, UK*

**Aims**

Whether monitoring was adequate according to Maudsley guidelines.

Whether discussion of treatment options and explanation of side-effects documented.

**Methodology**

The clinical notes of 37 in-patients were analysed at the Becklin Centre, St. James University Hospital, Leeds. It included clients already on mood stabilizers and those newly prescribed.

**Results**

(a) Patients commenced on mood stabilisers in this admission:

Baseline investigations were carried out in 100% of the patients and they were all documented, although only 79% of them were in line with Maudsley guidelines. Only 72% fulfilled the criteria for further monitoring.

The decision to prescribe had been discussed with only 50% and the side effects of the medication were discussed in only 79% of the clients.

(b) Patients already on mood stabilisers at admission:

Only 67% of the clients were monitored by regular blood investigations of which 80% were in line with Maudsley guidelines. All the patients were being monitored regularly for efficacy and only 60% of them were being monitored for side effects.

**Conclusions**

Although baseline investigations were 100% on admission, most were not in accordance with Maudsley guidelines. Documentation in clinical notes of the blood investigations, discussion of treatment options / explanation of side effects were not adequate

**Recommendations**

1. To increase the awareness among junior doctors about;
2. Maudsley guidelines during teaching/induction;
3. Involve the pharmacists to ensure adequate monitoring Improve documentation in patients' notes.

# DEPRESSION AND ITS MANAGEMENT

## P7.1

### VENLAFAXINE (VELAFAX®) IN THE TREATMENT OF DEPRESSIVE DISORDER COMORBID WITH GENERALIZED ANXIETY

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**Background**

MDD and anxiety are highly comorbid. Both NE and 5HT are implicated in the pathogenesis of MDD and Anxiety. Agents with dual NE/5HT mechanisms are effective treatment options for MDD with anxiety. Venlafaxine is a phenethylamine bicyclic derivative, chemically unrelated to tricyclic, tetracyclic or other available antidepressant agents.

**Methods and Subjects**

The subjects were 30 adults who met the criteria for the diagnosis of Depressive Disorder (F 32-F33.99) comorbid with Generalized Anxiety Disorder (GAD) according to ICD-10 and who gave informed consent to participate in this study. Standardized psychometric instruments (HAM-D21, MADRS, HAM-A, CGI-S and CGI-I) were used for assessments prior to entering in the study, and in 3, 6 and 12 weeks follow-up. Safety was evaluated through recording and analyzing of adverse events. Velafax® was prescribed for 12 weeks in a flexible-dose regimen.

**Results**

HAM-D21 score decreased from the mean of 32.8±5.54 at baseline to 26.63±5.15 after 3 weeks, and 19.57±3.53 at 6 weeks with the final mean o 11.40±6.18 after 12 weeks. All the above changes were statistically significant (p≤ 0.01). Equally significant reduction was found in the mean MADRS score; from 34.57±6.71 at baseline to 29.70±6.11 in 3 weeks, 20.13±5.03 in 6 weeks and 10.00±7.31 after 12 weeks of treatment. Further on, the mean HAM-A score was significantly reduced from the baseline mean of 36.20±4.15 to 30.27±4.05 in 3 weeks, 22.17±6.11 in 6 weeks and 12.23±8.41 in 12 weeks follow up. Significant decrease in severity of illness score was recorded with CGI, as well as significant global improvement of the subjects; 7 (23.3%) of the subjects recovered, and 17 (56,7%) had a clinical response while 6 (20%) had improvement of symptoms. Deterioration of symptoms or severity of illness was not recorded. Tolerability of Velafax was excellent in 80% of the subjects and very good in the remaining 20%. Al of the subjects completed the 12 week course of treatment with Velafax.

**Conclusions**

Velafax proved to be an efficacious, safe and well tolerated agent for the treatment of Depressive disorder comorbid with Generalized anxiety disorder for the subjects in this study.

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# P7.2

## LIGHT THERAPY IN PREGNANT WOMEN WITH DEPRESSION AND ANXIETY

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**Background**

Bright Light Therapy (L.T.) is the recommended treatment for Seasonal Affective Disorder (SAD); in addition, light therapy has new applications, as an antidepressant modality. In this study we focused on the role of L.T. in pregnant patients with depression or anxiety.

**Materials and Methods**

Nine patients were included in this naturalistic study about light treatment, with the following diagnoses: recurrent depression (1 patient), depression in bipolar spectrum (3 patients), cyclothymia (1 patient), panic disorder (PAD - 3 patients), social phobia (1 patient); two patients between them (one patient with PAD; the patient with cyclothymia) had L.T. administered twice during their pregnancy; therefore in this study we evaluated eleven cycles of light treatment.

"Global Assessment Scale" (GAS), together with a clinical interview, was used to determine the effect of the LT, before and after treatment, and then after one month.

**Results**

Very satisfactory results have been obtained: the "GAS" shows a clear cut final score, except in one case after one-month follow up (patient with depression in bipolar mood disorders type II). Any treatment-emergent adverse symptoms were not reported during this study.

**Conclusions**

Light therapy was shown to be effective, with a wide spectrum of action with several new applications. Its tolerability and safety during pregnancy was demonstrated.

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# P7.3

## PSYCHIATRIC AND PSYCHOLOGICAL ALTERATIONS IN PATIENTS OPERATED FROM INTRACRANIAL ANEURYSM

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Scales for determination of the general outcome in patients are often used in the neurosurgical practice. According to these scales, patients could be with good neurological status, but with significant changes in memory, socialisation, working ability, psychological and psychiatric status. 80 patients, operated at the Neurosurgical clinic Skopje in the period from year 2001 to 2006, with ruptured intracranial aneurysm are analysed. The Folstein MMSE score is used for determination of cognitive disorders. Outcome is determined with standard psychiatric interview, psychological exploration and with the Hamilton scale for depression and anxiety. The Man Whitney U test and student t test were used for statistical analysis. The analysis of cognitive functions has shown that 21 out of 60 patients with a good neurological outcome with grades 0, 1 and 2 according to Rankins scale had significantly disturbed psychological functions, changes in attention, memory and thinking. In 9 patients, zones with ischemia were registered on the control KTM which correlate with disturbed cognitive functions and mood changes (anxiety or depression). Two patients manifested frontal symptomatology. Three patients in which dysphasia was registered had a severe depressive episode without any psychotic elements.

# P7.4

## THE CHALLENGE OF ADULT ADHD: CLINICIANS' EXPERIENCE IN THE REAL WORLD; A SURVEY OF THE VIEWS OF PSYCHIATRISTS

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**Aims**

We aimed to survey psychiatrists' attitudes and their experience in the diagnosis and management of adult Attention-Deficit Hyperactivity Disorder (ADHD).

**Background Review**

As children with a diagnosis of ADHD grow into adulthood, adult mental health services will increasingly be faced with the responsibility of their care. This demand has already been identified in the UK and has led to the establishment of specialised Adult ADHD clinics like the one at Maudsley Hospital.

**Method**

A postal questionnaire was sent to 109 psychiatrists (Consultants, SpR's, SHOs' & Staff grades) working within the Derbyshire Mental Health NHS Trust.

**Results**

Out of 109 questionnaires sent out, we received 64 responses (59%). The majority of the psychiatrists (79%) believed in the concept of Adult ADHD, but only 29 % felt to be competent in making the diagnosis. Almost everyone (94%) felt the need to have a training course, with 57% supporting the setting up of a specialist service.

**Conclusions**

This survey suggests that most psychiatrists consider that they are not competent in the management of Adult ADHD, and that adult mental health services need to consider how training could be provided.

**Declaration of interest**

None.

# P7.5

## THE RELATIONSHIP BETWEEN HAVING SMOKING OR DRINKING PARENTS AND THE OCCURRENCE OF SMOKING OR DRINKING IN THEIR ADOLESCENT CHILDREN

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***Keywords:*** *smoking - drinking - adolescents - parents*

A survey was conducted during the year 2004, on 702 high school students (response rate78.5%). Aim: to find a relationship between having smoking or drinking parents and the occurrence of hazardous/harmful smoking or drinking among their adolescent children.

**Methods**

The questionnaire consisted of questions regarding age, smoking and drinking habits in students, smoking and drinking habits of the parents of the students and financial state of the family. Some questions were designed to be answered as either yes or no answers and some were designed to require the respondent to choose only one of a number of possible answers.

In order to investigate the effects of the mother's and the father's smoking and drinking habits on the habits of the students, two multiple regressions (stepwise) were run, firstly on the students' drinking habits and then on the students' smoking habits as dependent variables and then on the mothers' and fathers' drinking and smoking as independent variables.

**Results**

The more parents smoke and/or drink, the more their sons or daughters are likely to smoke and/or drink as students. The mothers' smoking appears to exert a stronger influence than the fathers'. But the fathers'

drinking seems to exert a stronger influence than the mothers'. Perceived family prosperity has no influence on drinking. Neither the parents' habits of smoking neither the habits of drinking influence the development of the other habit in their children.

# P7.6

## PSYCHOSOCIAL ASPECTS OF BREAST CANCER

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Cancer, the world itself produces images of distress in the mind of a common man including the fear of incurability or even death. Breast cancer is one of the most common cancers and arguably has most severe psycho-social impact. With the improvement in diagnosis and treatment, the survival in cases with breast cancer is prolonged and focus is shifting from cure to its psychological and social aspects. The psychosocial impact starts when person is screened, continues through diagnosis and lasts through the treatment and recovery. Psychosocial factors like coping style, social and emotional support, stress, personality and spirituality have pathoplastic effects and affect the course and outcome of breast cancer. Psychosocial impact includes effects on decision making, financial problems, problems with work and relationships, concern for children and most importantly women's view of herself apart from increased incidence of affective disorders, anxiety disorders, and sexual dysfunction in these patients. Various treatment modalities also have their own effects on patient's psychosocial, sexual, and functional well being. Monitoring quality of life (QOL) helps in decision-making to identify women who require psychosocial interventions. The risk factors defining at-risk women for psychological sequel are understood to a large extent and such women should be monitored closely for development of psychosocial morbidity. Positive psychosocial intervention improves the well being and quality of life of cancer patients. Awareness and knowledge along with social and emotional support are the cornerstones to decrease psychosocial morbidity. We present a narrative summary of the literature on this deadly disease, on the above aspect, which is quite often not well considered amongst all the sophisticated strategies for diagnosis and management.

# P7.7

## EMOTIONAL DISTRESS AND PSYCHOLOGICAL MORBIDITY IN PSYCHIATRY TRAINEES

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**Introduction**

This survey is to identify the emotional distress and psychological morbidity in psychiatry trainees in Greater Manchester following a major reform of postgraduate medical education in the United Kingdom. Modernising Medical Careers (MMC) introduced significant changes to career structures and the hence overall service provision.

**Methods**

A prospective collection of data was taken during the first post of the new training scheme (August 2007). A survey employing the GHQ-12, a validated rating scale sensitive to detect psychological distress, along with demographic information was carried out amongst doctors in psychiatry post below the level of ST 4. A total of 41 forms were completed and analysis included parameters like speciality training grade, age, sex, marital status, local or foreign graduates and GHQ scores. Confidentiality was maintained throughout the survey.

**Results**

The analysis of GHQ scores had a mean of 11.9, median of 12 and mode of 8.5. 16 trainees (39.9%) had a score of >15 indicating emotional distress and out of them 7 (17%) had a score > 20 indicating severe psychological problems. There was no significant difference in gender. 63% were single and 54% were foreign graduates.

**Clinical implications**

A significant number of trainees had psychological morbidity which may require intervention. This may have an implication on junior doctors training and overall care of the patients. A change of this nature, thought to be the largest in the history of the NHS, has various repercussions and this adds to the evidence for the need for more robust planning in the system as well as the support offered to those directly involved.

# P7.8

## CORRELATION BETWEEN QUESTIONNAIRE AND PERFORMANCE BASED MEASURES OF IMPULSIVITY – A PART OF NEWMOOD STUDY

***Alan Sweeney, Ian Anderson & Samir Shah***
*University of Manchester, UK*

**Introduction**

This study compares self-report measures of personality and impulsiveness against task-based delay discounting (DD) measures of impulsiveness in subjects with different degrees of depression.

**Method**

146 participants were recruited as a part of the New Mood study in the Neuroscience and Psychiatry unit in Manchester determined by semi-structured interview. All participants completed self-report questionnaires (personality: NEO-PR-I, TPQ, impulsivity: IVE, BSI and CTQ) and a computer-based task that test one's tendency to select a small immediate reward over a larger delayed reward (DD task). Hyperbolic models produce quantitative measures related to delay and quantity discounting which were correlated against questionnaire measures of personality and impulsivity.

**Results**

There was no significant difference in impulsivity measures (self report or behavioral task) between males and females. However differences were found for harm avoidance and reward dependence. Impulsivity measured by the IVE was higher in currently depressed than control groups. Neuroticism, harm avoidance, extraversion and conscientiousness showed significant difference between groups. Harm avoidance and neuroticism correlated positively with depression. Males and females had significant correlations between IVE and neuroticism, novelty seeking (positively), agreeableness and conscientiousness (negatively). DD measures did not vary according to depressive state. Males showed significant correlations between IVE and DD measures, namely gradient, K+ true, K+ zero (all negatively correlated) and intercept true (positively correlated). This did not hold true in case of females.

**Discussion**

This study suggests that impulsivity is not a homogenous entity and need further defining. Further longitudinal studies are required to substantiate significant correlation between IVE and DD in males. This study raises question as to how far questionnaire-derived assessment of impulsivity reflects objectively determined behaviour requiring more data and research.

# P7.9

## ADOS ASSESSMENTS AT THE WINNICOTT CENTRE- HOW WELL DOES ADOS SCORE CORRELATE WITH CLINICAL IMPAIRMENT?

***Umar Patel, Karim Rajput & Ruth Marshall***
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**Introduction**

Autistic Spectrum Disorder (ASD) is increasing in prevalence. There are various tools used in the assessment and diagnostic process of ASD. The Autism Diagnostic Observation Schedule (ADOS) is recommended in the National Autism Plan for Children. ADOS is an additional tool for diagnosis, which depends on the complete clinical assessment.

**Aims**

We sought to investigate the relationship between ADOS module 3 scores and severity of clinical

impairment. Furthermore identification of correlation with key factors that indicate severity was examined.

**Methods**

229 consecutive cases between 2003 and 2007 where an ADOS was requested were identified. The case notes were examined and only those with a diagnosis of ASD, which also had a module 3 ADOS completed were analysed. The ADOS scores were compared with an impairment questionnaire designed to reflect clinical severity.

**Results**

From the 229 cases identified, only 73 were included. 65 (89%) were male and 8 (11%) were female. The group had 59 (81%) with moderate, 13 (18%) with significant and only 1 (1%) with severe impairment. Scatterplot analysis showed correlation between ADOS scores and severity of impairment, however a linear regression was performed on this data, which revealed no significant relationship. Each individual question was compared to the total ADOS score using either T tests or one way ANOVAs to show any correlation; the only relationship which was statistically significant was that with Special Educational Needs.

**Conclusion**

Arguably, ADOS does not need to be carried out in every diagnostic process for ASD. This was a small study, and only limited to one module of ADOS. Larger numbers are needed, along with all modules being included. Children with home tuition were not included in the study. Further investigation is needed using a questionnaire which is more thorough and compiled with input from several experienced clinicians.

## P7.10

## ANTIDEPRESSANT USE IN TREATING DEPRESSION IN CHILDREN AND ADOLESCENTS

***Barry O'neill***
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Research have shown that the use of antidepressants in children and adolescents has improved the knowledge of the safety and efficacy of these medications and exposed the need for further research rather than relying on the extrapolation of data from trials involving adults. In this article, I review the current state of research into antidepressant therapy for major depression in children and adolescents. In addition, the article discusses methodological issues and clinical implications specific to the pediatric population.

## P7.11

## SEIZURE DURATION AS AN INDICATOR OF THERAPEUTIC EFFICACY IN ECT
### A Case report

***Madhavan Seshadri, Soma Sekhar Tadi, Mark Agius & Rob MacInness***
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In the practice of Electroconvulsive therapy (ECT) the relationship between the strength of stimulus and seizure duration is complex. The significance of seizure duration as a marker of therapeutic efficacy of ECT is a much-debated topic in itself. In this context, the authors report the case of a 70-year-old Caucasian lady who presented with a clinical diagnosis of Recurrent Depressive disorder, Current episode - Severe depression with psychotic symptoms. She received three courses of ECT over the past twelve months, and responded very well on each occasion with no evident cognitive deficits. The authous will debate the relevance of seizure duration in relation to strength of stimulus applied and the clinical outcome in this particular patient.

# EPIDEMIOLOGY AND TRANSCULTURAL ISSUES

## P8.1

### THE EPIDEMIOLOGY OF PSYCHOSIS IN LUTON

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**Background**

There is a relative dearth of epidemiological research on psychosis. Most of the published literature is either at a national scale, or compares urban and rural areas. Little is known about how psychosis rates vary within contrasting urban areas. Variation in rates would have implications for the aetiology of psychosis.

**Aims**

To determine the variation in psychosis prevalence in different areas of a city.

**Method**

We conducted a retrospective audit of the caseloads of the four Community Mental Health Teams (CMHTs) in Luton. Caseloads were categorised by diagnoses recorded in the medical notes, and by patient age. We performed a descriptive analysis of the levels of psychosis in each CMHT, considered against multiple population parameters including deprivation and ethnicity as recorded in the 2001 UK census.

**Results**

Areas with high indices of deprivation, and a large ethnic minority and migrant population, were found to have higher rates of psychosis. There was considerable overlap between areas with large ethnic minority and migrant populations, and areas of high deprivation. We were unable to disentangle this confounding effect in our audit.

**Conclusions**

Our findings are consistent with, and build on, the MRC Aetiology & Ethnicity of Schizophrenia & Other Psychoses (AESOP) study which showed variation in psychosis between three urban centers. The increased rates of psychosis observed in areas with large migrant and ethnic minority populations, and in areas of high deprivation, has implications both for the planning of local services, and in further understanding the role of environmental factors in the aetiology of psychosis. There is a need for further prospective epidemiological studies at this geographical scale.

## P8.2

### ISSUES REGARDING THE DELIVERY OF EARLY INTERVENTION PSYCHIATRIC SERVICES TO THE SOUTH ASIAN POPULATION IN ENGLAND

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In order to implement a successful early intervention service for psychosis, we suggest that cultural, religious and issues surrounding language and communication should be considered.

The delivery of the standard psycho-social interventions used by early intervention services requires effective engagement with the patients.

In June 2003 an audit was conducted amongst 75 patients from different ethnic groups in Luton. Measures of engagement with mental health services included; number of missed outpatient appointments over one year and compliance with medication regimes.

The results of this audit showed that South Asian patients are more likely to miss appointments and refuse to take medication in comparison to their Caucasian or Afro- Caribbean counter-parts. Further analysis revealed that the Bangladeshi subgroup had missed more appointments and had a greater proportion of medication refusal in comparison to the other Asian subgroups.

These results support the pioneering work by Dr Robin Pinto in the 1970s; he observed that Asian patients perceive and utilise mental health services in a different way compared to the Caucasian population.

The observations from our study depict the difficulties in engaging ethnic minority patients into existing services. Hence we argue that future interventions should be adapted and tailored to overcome cultural and language barriers with patients and their families.

# P8.3

## IS THE INCIDENCE OF AUTISM INCREASING IN CENTRAL MANCHESTER?

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**Background**

There is evidence to suggest that the incidence of Autistic Spectrum Disorders is increasing. The primary aim of this study was to establish if this was the case in the population served by the CAMHS unit at the Winnicott Centre in Central Manchester. The study also aimed to explore eight other trends in patient data collected between 2000 and 2007. These included data for ethnicity, area of residence and age of diagnosis. The National Autism Plan for Children highlights the need for both early intervention and the importance of assessing the needs of local populations. This study provides information which addresses these requirements.

**Methodology**

The study was conducted using the Social Communication and Interaction Team patient Database at the Winnicott Centre. This is an SPSS file comprising comprehensive details of 240 patients and their families. This data was taken from patient case notes and missing fields were completed during the study.

**Results**

This study found that the incidence of autism increased in the period studied, and that there were unexpectedly high numbers of males to females (6.4:1) as well as patients from ethnic backgrounds (45% in cohort compared to 38% of population of Manchester) and ethnic variation of the population, with a particular over-representation of Black British patients (16.8% compared to 4.9% in Manchester population).

**Conclusions**

In order to improve the accuracy of the SCAIT Database, and hence increase both the information available to clinicians and power of future studies, it was decided that a modified proforma would be written for insertion at the front of each set of clinical notes produced at the Winnicott Centre. From this standardised form the relevant data could be accurately and consistently accessed for inclusion in the Database.

# P8.4

## ANTIPSYCHOTIC PRESCRIPTION TRENDS ACCORDING TO ETHNICITY

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**Aims**

The UK has an ethnically diverse population. Recommendations have been made that the prescription of psychotropic medication be audited on a yearly basis to ensure that any discrepancies between ethnic groups continue to fall.

This study aims to examine whether there are differences in the implementation of the NICE antipsychotic prescribing guidelines between white British and Asian patients in Bolton, Greater Manchester i.e. the swapping of conventional antipsychotics to atypical antipsychotics where appropriate.

**Method**

Data were collected for all eligible Asian patients in Bolton, Greater Manchester and for a comparable number of white patients. Retrospective case note analysis was employed, gathering data on demographics, current antipsychotic, past antipsychotics, compliance with NICE, and documentation of effectiveness and tolerability of current antipsychotic medication.

Results were then tabulated and analysed using the appropriate statistical tests (Fisher's exact/chi-squared test).

**Results**

Documentation of tolerability and effectiveness was 100% or nearly 100% for both groups, despite language problems in the Asian group++.

There was no significant difference in the proportion of white and Asian patients changed to atypical antipsychotic medication from conventional antipsychotics. There was no evidence of prescription discrepancy between the two groups. Adherence to NICE guidelines was good.

Most changes to atypical antipsychotics were as a result of poor tolerability rather than ineffectiveness.

**Conclusions**

There appears to be equity in the prescribing of antipsychotics for white and Asian patients. This is in spite of the fact that there is evidence suggesting that patients of ethnic minority groups have more adverse experiences and outcomes within mental health.

However the results must be taken in context, with care taken in extrapolating these results further due to the small sample size and geographical area.

Nevertheless as a preliminary study these results are encouraging, and it is hoped that further research will be stimulated over a wider area to establish national trends.

**Declaration of interest**

None.

## P8.5

## OUTCOMES OF PREGNANCY IN WOMEN SUFFERING FROM SCHIZOPHRENIA - ANALYSIS OF FIVE YEARS OF DATA

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**Introduction and Aims**

It is generally thought that women suffering from schizophrenia do not make good mothers. We wanted to examine the morbidity of schizophrenia in pregnancy and the outcomes for both mothers and their babies. Schizophrenia typically results in long admission in the general population and we wished to see whether this applied to women suffering form schizophrenia after their babies were born.

**Method**

The Mother and Baby Unit, Birmingham is the specialist perinatal psychiatric service for the West Midlands area. We looked at mothers with schizophrenia who had been admitted to the MBU over the past 5 years. We included all subtypes of schizophrenia and schizoaffective disorder. The comparison group was all mothers excluded from the schizophrenia group.

**Results**

The proportion with schizophrenia admitted to MBU was 15-35% (mean of 25%). The length of admissions was also surprisingly high after 4 weeks.

They were more likely to be single, and unmarried compared with the comparison group. Mothers of Asian and Afro-Caribbean origin were overrepresented in the schizophrenia group.

37% were admitted under section of the MHA compared with only 21% of the non-schizophrenia group. Social services involvement was in two-thirds of the schizophrenia group, but only one-third in the non-schizophrenia group.

As expected the schizophrenia group had higher rates of oral and depot antipsychotic prescribing; depot was prescribed in 50% of the cases. The non-schizophrenia group predictably had a higher percentage of antidepressants prescribed.

**Discussion**

The data revealed that mothers with schizophrenia generally required longer admissions, often under section, input from social services and close follow up after discharge.

Despite our initial expectation, with specialised input from the MBU, we are delighted to see that most mothers with schizophrenia were able to return home with their babies. The figures are quite encouraging

## P8.6

## WHEN TAKING MEDICATION IS A SIN!

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Medication is probably the most frequently used form of treatment prescribed by clinicians within the mental health setting. Non-adherence to pharmacotherapy in mental illness significantly impacts upon the lives and well being of mental health sufferers (1). The causes of poor adherence to treatment are numerous but cultural and religious beliefs regarding mental illness and the taking of psychotropic

medication are significant factors cited in the literature (2). Resolving non-adherence to pharmacotherapy should involve a comprehensive assessment of the patients' demographics, social circumstances and cultural and religious beliefs (3a). However, it is generally believed that religious beliefs do not influence medication compliance.

Religious laws do not restrict the use of psychotropic medications but many do forbid the use of animal based derivatives, specifically gelatinous products and stearic acid. These are generally derived from beef and/or pork products. This has major implications for many patients, particularly the followers of Judaism, Islam, Hinduism, Buddhism, Seventh day Adventism and Christian Orthodox Church. Research in this important area has been scarce (3b).

In this poster, we have made an effort to take our reader through the corridors of history to understand various cultural, religious and personal beliefs that might have a bearing for our patients when they are prescribed psychotropic medication that may contain ingredients directly in clash with their beliefs. We have also identified these psychotropic medications and have suggested alternative approaches in dealing with these sensitive ethical issues.

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# P8.7

## TO TRUST OR NOT TO TRUST?

### Prescribers' attitudes to using psychotropic medication with religiously forbidden contents

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**Background**

Patients must be able to trust doctors with their lives and well being. To establish this trust doctors must respect patient's autonomy (1). All prescribers also have an obligation to respect patients' medical, cultural, religious and dietary requirements (2). Inability to recognise these may compromise the therapeutic alliance. Religious laws do not restrict the use of psychotropic medications but many do forbid the use of animal based derivatives. This has major implications for many patients. Research in this important area has been scarce (3).

**Aims**

To ascertain attitudes, awareness, knowledge and variations in prescribing habits of psychiatrists when addressing issues of faith, culture and dietary requirements (in keeping with GMC and Royal College of Psychiatrists' guidelines) and how these may affect the 'therapeutic trust'.

**Methodology**

We undertook a cross-sectional postal survey aimed at all the prescribing clinicians in the participating NHS Trusts of the North Trent Rotational Training Scheme in Psychiatry and Southwest Yorkshire Mental Health Trust (SWYMHT). We present the initial findings from SWYMHT.

**Results**

During December 2006, a total of 40 audit sheets were received from 100 prescribing clinicians within SWYMHT. Our results reveal widespread awareness of the GMC's guidance on seeking patients consent. Although many psychiatrists are aware of animal based derivatives in psychotropic medication, only a minority are aware of 'forbidden' ingredients with certainty. Many psychiatrists are treating patients who may well object to taking such compounds but alarmingly only a minority are discussing these issues with

patients. There was, however, a desire that these issues should be discussed with patients, despite concerns that volunteering such information could potentially create barriers to future compliance.

**Discussion**

More research and empiric data is needed to determine the extent to which patients are affected by these issues. Diversity training combined with taking a genuine interest in patient's wishes will not only minimise 'mistrust' amongst service-users but also facilitate prescribing in a therapeutic relationship. Adopting a non-judgemental approach and avoiding assumptions based on ethnicity, culture and religion will help deliver a culturally aware and religiously sensitive service.

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# P8.8

## ROLE OF RACE AND ETHNICITY IN MODERN PSYCHOPHARMACOLOGY

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**Background**

Ethnicity is reported to be an important, but often ignored factor in psychopharmacology. Recent advances in molecular biology and the vision of 'personalized medicine' have spurred a debate on the role of ethnicity in this field.

**Aim**

To review the role of race and ethnicity in psychopharmacology.

**Method**

Literature review.

**Results**

Despite considerable controversy on what the concepts of ethnicity and race actually measure, they are considered as important proxies for a person's culture, diet, beliefs, health behaviours and societal attitudes. Research has shown a number of ethnic differences in the clinical presentation, treatment, clinical response and outcome of mental illnesses. A number of ethnically specific variations have been found in the genetic and non-genetic mechanisms affecting pharmacokinetics and dynamics of psychotropic drugs, which might explain the differences in drug use and response across ethnicities.

**Conclusion**

Ethnic differences exist in the psychopharmacological management. Although some of these could be partially explained by genetic factors, a number of ethnically based variables like culture, diet and societal attitudes could as well potentially have a significant, but as yet unquantified influence. Future research needs to address the problems with defining and accurately measuring 'ethnicity', as well as focus upon conducting studies that could guide treatments for people from diverse backgrounds.

# P8.9

## MENTAL HEALTH TRENDS IN NIGERIA

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There is uncertainty as to whether women in Nigeria have more psychological symptoms than men and whether these psychological symptoms have increased over time.

This article assesses the changes in the symptoms in women over time as compared with men and assesses the effect of failures in their individual/collective lives. The study is based on random samples and analysis psychological distress, number of symptoms, post-traumatic stress reaction (PTSR), chronic fatigue and alcohol misuse. The results expose the ratio of the symptoms in either sex and their positive/negative associations.

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