

made with 16 active derivations in six hours, one hour pre-alcohol and five hours post-alcohol, on each one of experimental days. This generated 20,736 (36 × 36 × 16) date pairs, which were then used in the construction of the correlation net.

### BRAIN ANTIBODIES IN MENTAL DISORDERS

*K. Schott, A. Keller, A. Batra, M. Bartels, G. Buchkremer. Department of Psychiatry and Psychotherapy, University of Tübingen, Osianderstr. 24, D-72076 Tübingen, Germany*

Alterations of the immune status in psychiatric patients are known for decades. In these patients antibrain antibodies were regarded as a hallmark of autoimmune processes in mental disorders, especially in schizophrenia. We reexamined these studies by using an ultrasensitive microtechnique for gel electrophoresis, western blotting and ELISA.

Despite other reports no antibody binding to brain specific antigens could be detected. Interestingly antibodies only bound to some proteins later being identified as histones of the subgroup H3. No significant changes in IgG-levels of antibodies against histones compared to controls could be detected except for a slight decrease in cases of major depression. IgM-antibody binding to histones was significantly elevated in sera of patients suffering from alcoholism, paranoid schizophrenia, organic psychosis and schizoaffective disorder. According to our results a subgroup of schizophrenic and schizoaffective patients exhibit a stimulation of histone antibodies indicating an autoimmune process.

### ICD-10 AND SCAN: PROBLEMS AND BENEFITS FOR RUSSIAN PSYCHIATRISTS

*T. Serebriakova, A. Moukhine. State Centre for Borderline Psychiatry, Volokolamskoe Sh 47, 123367, Moscow, Russia; National Centre for Mental Health 2-2, 113152, Moscow, Russia*

According to the preceding agreements psychiatrists in Russia have to pass on to the ICD-10 by 1997. However, its diagnostic criteria are known to be different either from those of previous ICD versions and traditional nosological approach of Russian psychiatry. With a view to ascertain if psychiatrists experienced difficulties in utilization of altered diagnostic principles of forthcoming ICD modern version 80 Moscow psychiatrists from psychiatric hospitals and research centres were interviewed. About 55% of respondents reported some complications in application of the ICD-10 diagnostic system especially due to its syndromal classificational principles whereas 20% showed no troubles with it; 25% had not yet elaborated distinct personal attitude to the proposed modernized classification. It was obvious that psychiatrists precedingly acquainted with the DSM-system, PSE or SCAN and in particular those ones who had already applied them in researches more easily executed the ICD-10 diagnostic principles. Regarding the goal to expose if there were advantages of SCAN for psychiatric assessment the expert investigation of 20 non-psychotic patients was performed by 8 psychiatrists with roughly equal psychiatric training 3 of whom had in addition undergone SCAN course with the help of English colleagues. It was revealed that symptoms' detection was approximately by one third more precise in SCAN applied investigation. The output suggests the necessity of forestalling training in SCAN of research psychiatrists in conformity to ICD-10 installment in Russia to obtain common language for investigations both inside the country and those of foreign colleagues.

### MENTAL HEALTH OF MINOR NATIONALITIES OF THE FAR NORTH OF RUSSIA

*P. Sidorov. Department of Psychiatry, Arkhangelsk State Medical Academy, 51, Troitsky Ave., Arkhangelsk, 163061, Russia*

5,400 Nenets people live in Nenets Autonomous Area (NAA) of the Arkhangelsk region. The Nenets people have a genetic link to the Mongoloid race. This population has lived for several thousand years in the extreme conditions of the high latitudes of Russia.

In this report we shall try to describe the clinical peculiarities of schizophrenia, epilepsy and depression of the Nenets people.

The adaptive mechanisms of the Nenets population to extreme conditions and the disontogenetic factor are very important parts of the pathomorphological structure of psychic diseases. These two factors can either cause the malignant development of some psychic diseases (alcoholism) or make the progredient development of other diseases softer (schizophrenia, epilepsy, depression). The psychosomatic factor is very important for some psychosomatic diseases and depressions. Adaptive properties of endorphin-opioid receptors in the structure of secondary compensatory reactions are rather important for the psychic and biological level of functioning during these diseases. Probably these mechanisms provide the lowering of the level of mental reactions. So, investigating psychic morbidity of the Nenets population we defined the invariantness of psychic diseases rather than their variability. In the entire Russian population, variability and polymorphism revealed themselves.

### ECOLOGY OF MENTAL HEALTH OF THE POPULATION OF THE NORTH OF RUSSIA

*Pavel Sidorov. Department of Psychiatry, Arkhangelsk State Medical Academy, 51, Troitsky Ave., Arkhangelsk, 163061, Russia*

The up-to-date social and stress situation demands the evaluation of equivalent of existing forms and methods of work of psychiatric services, the objectivity and effectiveness of medical statistics, the development of system of monitoring of the nation health and the quantitative evaluation of its social, ecological and genetic components.

The epidemiological diagnosis of mental health of the population of the North of Russia has revealed a multifactorness and polyethiologness of this nosological groupe. The maximal indices of incidentness and morbidity are noticed in extremal climate, geographical and ecological zones. The analysis having carried out for 10 years of standard indices of spreading of psychic diseases has revealed "territories of risk" which can be estimated as zones of psychic epidemics.

In the conditions of global social and stress situation in Russia it has been noticed a galloping increase of unpsychotic psychic and psychosomatic disorders, dieing out of psychic patients, increase of selfdestroying forms of behaviour (alcoholism, drug abuse, suicides). That is why it is possible to say that psychic endemia in Russia demands a radical structural and organisational review of activity of a psychiatric service.

### THEORY AND PHENOMENOLOGY OF ALTERED STATES OF CONSCIOUSNESS

*M. Simões. Faculty of Medicine of Lisbon, Psychiatric University Clinic, Av Egas Moniz, 1600 Lisboa, Portugal*

Altered States of Consciousness (ASC) present experiences with precise characteristics, that can be verbalized and seldom appear in the ordinary state of consciousness. ASC are usually self induced and ethiological independent but can occur as well spontaneously and are not a result of disease or social adversity. Generally they last for some minutes or hours in opposition to typical psychiatric disorder.

ders. During an ASC one can observe all described psychopathology without psychiatric disease because a reflexive and integrative psychological structure ("hidden observer") remains and gives unity to the experience. These mental states should not be considered pathological unless there are insufficient social or cultural structures to accept them or are the main way of coping with daily life. ASC also permit an understanding of ecstatic experiences, placebo effect and parapsychological phenomena.

### TOMORROW'S DOCTORS: HAS THE NEW CURRICULUM CHANGED ATTITUDES TO PSYCHIATRY?

Swaran P. Singh, Helen Baxter, Penny Standen<sup>1</sup>, Conor Duggan.  
*Academic Department of Psychiatry, University of Nottingham;*  
<sup>1</sup> *Department of Learning Disabilities, University of Nottingham*

**Aims:** The GMC's 'Tomorrow's Doctors' has altered undergraduate teaching with shorter attachments and more interactive learning. We studied the impact of this change in teaching on the attitudes of medical students to psychiatry and mental illness.

**Method:** Two groups of fourth year medical students from the old ( $n = 46$ ) and the new ( $n = 76$ ) curricula were asked to complete two questionnaires (Attitudes to Psychiatry-ATP and Attitudes to Mental Illness-AMI) on the first and last day of their psychiatric attachment.

**Results:** 110 (90%) students completed both the questionnaires. There was a significant increase in positive attitudes towards psychiatry and mental illness in both groups with no significant difference between the groups. Attitudes towards psychiatric treatments and the ability of the mentally ill to live independently showed the greatest change. The students' intention to choose psychiatry as one of the career options increased significantly following the attachment.

**Conclusions:** Medical students from the old and new curricula showed similar positive changes to psychiatry following their attachment.

### THE PSYCHOLOGICAL MORBIDITY ASSOCIATED WITH HEPATITIS C IN WOMEN WHO RECEIVED ANTI-D IMMUNOGLOBULIN

D. Sloan, D. Hickey, G. Kelly, N. Walsh. *Department of Psychiatry, St. Vincent's Hospital and University College Dublin, Ireland*

**Objectives:** In March 1994 a Hepatitis C virus (HCV) outbreak occurred in Ireland, which was caused by contaminated blood product anti D immunoglobulin. This study aimed to establish the prevalence of psychological morbidity in females with HCV.

**Methods:** Women ( $n = 60$ ) consecutively referred to the Liver Clinic for investigation of HCV who gave informed consent were administered a series of 4 questionnaires: The 28-item General Health Questionnaire, The Revised Impact of Event Scale (RIES), the Health Status Questionnaire (HSQ). Questionnaires were readministered at 3 monthly intervals prospectively for one year. Data was also collected regarding the women's physical health, Liver biopsy results, Liver function tests, and the need for treatment.

**Summary of Results:** Women who achieved caseness using the GHQ were significantly associated with Liver damage ( $p = 0.01$ ) and subjective measures of illhealth (HSQ) ( $p = 0.000$ ). High scores on the RIES were significantly associated with a past psychiatric history ( $p = 0.02$ ), Interferon treatment ( $p = 0.02$ ), and Social problems as measured by the SPQ. ( $p = 0.002$ )

**Conclusions:** There is an increased level of psychological morbidity among this cohort. Psychological morbidity was significantly increased in those with a past history of psychiatric illness, and those with a greater degree of Physical ill-health.

### EEG IN GILLES DE LA TOURETTE SYNDROME SHOWS ABNORMAL TOPOGRAPHY OF BRAIN ELECTRIC FIELDS

A. Stevens, W. Günther, M. Bartels, N. Müller. *Dept. of Psychiatry, University of Tübingen, Osianderstr. 22, D-72076 Tübingen*

Scalp EEGs of 13 patients with Gilles de la Tourette syndrome (GTS) and 25 matched controls were studied during rest and during a simple and a complex motor task. The data were evaluated by adaptive segmentation, which describes the stability, topographic type and sequence of brain electric field configurations in continuous EEG. The average duration of the brain electric microstates, their temporal stability and EEG carrier frequency was not different from normal controls. However, GTS patients showed an abnormal frequency of fields with a right-frontal/left-posterior orientation. The abnormal fields did not disappear when simple or complex motor tasks were performed. Motor-related activity was contrasted with two auditory tasks. All tasks led to characteristic temporal and topographic patterns of activity, and changes occurred in parallel in both GTS patients and controls.

We conclude that GTS patients EEG show abnormal brain electric patterns, but these are probably not confined to primary or supplementary cortical sites.

### ARSONISTS IN MAXIMUM SECURITY: MENTAL STATE AT TIME OF FIRESETTING AND RELATIONSHIP BETWEEN MENTAL DISORDER AND PATTERN OF BEHAVIOUR

M. Swinton, A. Ahmed. *Department of Psychiatry, Royal Liverpool University Hospital, Liverpool, L7 8XP, UK; Ashworth Hospital, Liverpool, L31 1HW, UK*

The utility of the concept of arsonists is unclear. In forensic psychiatric settings there is no equivalent concept for violent offenders who are generally assessed and treated in terms of their underlying mental disorders. This study seeks to establish similarities and differences between arsonists in terms of their mental disorders.

79 arsonists were identified in a Special Hospital. 68 had a clinical interview which included completion of the Functional Assessment Schedule (a rating of affects, cognitions and environmental stimuli present prior to firesetting and of the changes consequent on firesetting) and the Fire Interest Rating Scale. Subjects were compared by category of mental disorder and by gender.

Mentally Ill (MI) arsonists and Psychopathic Disorder (PD) arsonists reported similar symptoms at the time of firesetting; typically they reported that setting fires relieved affective symptoms. The major difference was in the time course of their behaviour. The first recorded arson conviction for MI patients occurred 7.8 years later than for PD patients and this paralleled the age of first recorded psychiatric contact. In terms of current symptoms and behaviours MI men, MI women and PD men were similar. PD women had a distinct group of current symptoms and behaviours. They showed high levels of eating disorder symptoms and self injury and also had a strong history of trauma in childhood.

Treatment of arsonists needs to include helping them find less destructive ways of relieving affective symptoms in addition to treatment of their underlying disorders. In PD women who set fires; eating disorder and self injury may be a useful risk marker of continuing arson risk.