

and their psychological problems, one main study with mainstream students (N = 1071) and two subsidiary studies with students from schools for children with "Emotional and Behavioural Difficulty" (EBD schools) (N = 139) and a small group of conduct disorder boys (N = 25) referred to a clinic were carried out.

Mainstream students were asked to fill in inventories on self-esteem (Coopersmith, 1967; Rosenberg, 1965), depression scale (Birlerson, 1981), Friendship, and demographic information. Teachers were also asked to fill in a psychological problems scale (Rutter B, 1967) and an Information questionnaire concerning academic performance, and whether or not the student had any referral to agencies because of his/her psychological problems at school.

Results of mainstream school adolescents showed that positive parent-child relationship (Home self-esteem) and school performance (School self-esteem) were positively associated with high total self-esteem and negatively with psychological problems. Students' academic performance also associated positively with self-esteem and negatively with psychological problems.

In general, self-esteem was negatively associated with behavioural and emotional problems. However, a comparison between a group with conduct problems identified by both their teachers and classmates and another group without any psychological problems did not show significant differences on self-esteem. A comparison between a group with behavioural problems and another group who had both conduct problems and depression, showed self-esteem to be significantly lower in latter group.

Finally, in comparisons of data from three sample sources, mainstream students displayed much better self-esteem and fewer psychological problems than students from EBD schools, while, similar results were not found for comparisons between mainstream students and the clinical sample.

#### SOMATIZATION AND SIDE EFFECTS OF TRICYCLIC ANTIDEPRESSANTS AND SEROTONINE REUPTAKE INHIBITORS — A NEUROPHYSIOLOGICAL AND PSYCHOMETRICAL INVESTIGATION

H.D. Sattler, H. Dech, S. Sandermann, H. Kick. *Department of Psychiatry, University of Heidelberg, Voss-Strasse 4, 69115 Heidelberg, Germany*

During the pharmacotherapy with antidepressants, somatic symptoms of the depression itself and side effects of the thymoleptic drugs — especially dysregulations of the autonomous system — are often overlapping, which might hinder the patient's compliance. In this study we evaluated the subjective complaints by appropriate standardized psychometric instruments (BDI, STESS, B-L). Additionally we carried out several neurophysiological investigations (NCV, F-wave, sympathetic skin response = SSR) and the Schellong test, as objective measurements.

According to this method, we investigated 6 healthy controls and 12 patients, undergoing treatment with tricyclic antidepressants (n = 6) or serotonin reuptake inhibitors (n = 6). Preliminary results showed not only more adverse effects and impairment in the psychometrically evaluation, but also neurophysiological changes in the tricyclically treated group. Under similarity of the other neurophysiologic parameters (F-Wave, NCV) a tendency of delayed latencies and decreased amplitudes and in 2 cases "absent responses" of SSR were observable in the tricyclically treated group.

Therefore we propose a combination of psychopathological, clinical and neurophysiological parameters to be taken into consideration in the decision making of antidepressant pharmacotherapy.

#### CHANGES IN BRAIN PERFUSION DURING OPIOID DEPENDENCE: SPECT IMAGING WITH Tc-99m-HMPAO

S. Schindler, L. Pezawas, G. Fischer, K. Diamant, C. Schneider, G. Forster, H. Eder, I. Podreka, S. Kasper. *University Hospital for Psychiatry, Clinical Department of General Psychiatry, Vienna, Austria*

The aim of this study was to describe abnormalities in brain perfusion in pure opioid dependent patients (DSM-IV 304.00). Twenty-one opioid dependent patients were included and Tc-99m-hexamethyl-propyleneoxime (Tc-99m-HMPAO) brain single photon emission computed tomography (SPECT) was performed to evaluate regional cerebral blood flow (rCBF). Cerebral computed tomography (CCT) was administered to seventeen patients in order to assess the possible effects of substance abuse on brain morphology. Drug history was evaluated with Europe-Addiction Severity Index (ASI). Present drug consumption was screened by urine samples with EMIT. Thirteen patients were undergoing a detoxification treatment and eight patients a methadone maintenance program. Just before imaging all subjects were examined in order to detect withdrawal symptoms with Wang's withdrawal scale. No subject showed withdrawal symptoms. Normalized rCBF-values in corresponding regions of interest (RIO) in both hemispheres were compared. Significantly higher left sided rCBF-values were found in the pre- and postcentral gyre (p = 0.001), the mesiotemporal (p = 0.003), superior temporal (p = 0.003) and inferior parietal cortex (p = 0.007). This study shows changes in brain perfusion during opiate dependence.

#### HIV — HIGH RISK BEHAVIOUR IDENTIFICATION IN A PRISON POPULATION OF INDIA: A PILOT SURVEY

Piyal Sen, John Strang, A.N. Choudhury, Ian Treasaden. *Psychiatric Unit, Northwick Park Hospital, London, UK; National Addiction Centre, Institute of Psychiatry, London; Institute of Post Graduate Medical Education & Research, Calcutta, India; Three Bridges Regional Secure Unit, North West Thames Forensic Psychiatric Service, London*

*Introduction:* According to W.H.O. predictions, India will be the country with the largest number of HIV positive cases by 2010. The prison population is highly vulnerable to HIV transmission, in view of the high prevalence of injecting drug use (Harding, 1990; J Strang, 1993) and higher prevalence of Sexually Transmitted Diseases (McMillan, 1988) than the general population. The present study is the first of its kind in India, looking at the prevalence of HIV high risk behaviour and knowledge/attitude towards AIDS in a prison population.

*Method:* 110 randomly selected remand prisoners were interviewed. 50% of prisoners had been remanded for drug-related and the other 50% for non-drug related offences. A structured questionnaire, in six parts, viz., demography, history of tattooing, drug abuse, blood transfusions, a sexual behaviour profile and knowledge/attitude towards AIDS was administered to the prisoners by a specially trained team of investigators. A similar study was done on 1006 subjects in prisons in England and Wales, using the same questionnaire.

*Results:* The sample population was all male with mean age of 30.7 years. 10.9% of the inmates were tattooed, 50% of this group had shared tattooing equipment. 36.5% of the population were regular drug abusers before entering prison, with the largest number on Heroin (29.1%), alcohol next (25.4%) and Cannabis (6.4%). 11.8% of the population had a history of injecting drugs. 2.7% had ever shared needles. 44.4% of the inmates had multiple sexual partners, with 43.6% having safe sex and 2.7% having homosexual practices. 10% of the population had heard about HIV testing with 9.1% perceiving themselves at risk of catching HIV, and 47.3% having no knowledge about AIDS.

**Conclusions:** Our data identify the considerable extent to which the prison population (restricted to the much larger male prison population in our study) represent a particularly high risk group with extensive lifetime exposure to injecting drug abuse, promiscuous sexual behaviour and tattooing. Furthermore, the study also identifies the extremely poor level of knowledge regarding HIV and AIDS in a high risk population. This has important implications for future AIDS control programmes in India.

#### GRAPHIC REPRESENTATION OF ILLNESS: A NOVEL METHOD OF ASSESSING PATIENTS' PERCEPTIONS OF THE IMPACT OF ILLNESS

Stefan Büchi, Natalie Timberlake, Tom Sensky. *Department of Psychiatry, Charing Cross & Westminster Medical School, West Middlesex University Hospital, Isleworth, Middlesex TW7 6AF, United Kingdom*

**Background:** In people with chronic illnesses, a measure of the overall importance of the illness to the person's life would be valuable to better understand individual responses to illness and develop focused psychosocial interventions. Existing instruments measuring cognitive, behavioural or emotional responses to illness are unsatisfactory as direct measures of the importance of illness because, with very few exceptions, they focus on factors contributing to morbidity rather than to well-being, and measure specific pathology (such as depression, or the presence or absence of functional impairment). In an attempt to devise a summary measure of the importance of illness to the individual, a simple graphic task has been devised, and used in a pilot study of 24 people with rheumatoid arthritis attending a rheumatology outpatient clinic.

**Methods:** Subjects were shown an A4-size sheet of paper, with a coloured disk, 4 cm in diameter, at one corner. Each subject was asked to imagine that the paper represented his/her life, and the disk represented the subject's core self. The subject was then given another disk, the same size as the fixed one. Subjects were asked to imagine that the second disk represented the illness, and instructed to place the disk where they considered most appropriate on the sheet of paper. The main outcome measure of task was the distance between the two disks representing 'self' and 'illness'.

**Results:** With only 2 exceptions, subjects had no difficulty understanding the task. The distance between 'self' and 'illness' showed no correlation with a measure of disease activity, but was significantly correlated with depression ( $r = -0.64$ ), the General Health scale of the SF36 ( $r = 0.42$ ), Antonowsky's Sense of Coherence scale ( $r = 0.59$ ), and measures of pain.

**Conclusions:** This simple task appears to provide a summary measure of the importance of illness to the sufferer. Because it is non-verbal, its results do not rely on the subject's knowledge of spoken English. However, it can also be used as a projective assessment, by encouraging the subject to describe aloud how he/she chooses where to place the illness in relation to self. Used thus, it can contribute to the individual assessment of patients prior to a psychosocial intervention. Work is currently underway to further characterize responses to the task.

#### RECOGNITION AND TREATMENT OF PSYCHOPATHOLOGICAL DISORDERS IN PAEDIATRIC CLINIC

Anatoly A. Severyn, Irina P. Kireeva, Victor I. Brutman, Yury M. Belosiorov, Maria A. Shkolnikova. *Independent Association of Child Psychiatrists and Psychologists, 23, 18/15, Grusinsky val, Moscow, Russia*

The long observation of 166 children with functional paroxysmal

tachycardia and extrasystolia shows that mental disorders revealed in more than 80% of cases (mainly mono- and bipolar affective syndrome including panic attacks, and also chronic hypomanias, neurotic, neurosislike, psychopathialike, epileptiform states, borderline personal disorders. We noted a distinct relation between functional cardiac and psychopathological disorders connected inseparably in the integral psychovegetative syndrome. Nootropes antiarrhythmic effect is strengthened if peculiarities of their psychotropic action are taking into account: nootropl as a stimulator is more prescribed in conditions of asthenic range, encephabol possessing mild antidepressive properties is effective in subdepressive states, phenibutum and pantohamum as sedative drugs are preferable in anxiety-disthymic, phobic, hypomaniac disorders. The use of psychotropic drugs according to the peculiarities of mental disorders in given patients leads on the one hand quite often towards considerable improvement manifesting in cessation or obvious relief and frequency reduction of the attacks of paroxysmal tachycardia with simultaneous normalisation of mental condition. The most effective here are normothymics, such as finlepsin, lithii carbonas, sonapax and also antidepressants. The principle of minimal sufficiency used by us during psychotropic therapy of psychovegetative disorders helps to avoid to a certain extent negative consequences of treatment, when the intrinsic vegetotopic effect of psychotropic drugs can level the psychotropic action and hinder the recovery.

#### HARM REDUCTION BY METHADONE MAINTENANCE TREATMENT OF GERIATRIC HEROIN ADDICTS

Chandresh Shah, David Highfill, Lena Simitian. *U.S. Department of Veterans Affairs, 315 E. Temple Street, Los Angeles, CA 90012, U.S.A.*

The exacerbation of asthma, recurrence of eczema or reemergence of angina inspite of treatment are often regarded as the natural course of disease, rather than simply a treatment failure. Patients are not penalized, nor are physicians criticized for such not-so-perfect outcome. But continued heroin use by addicts on Methadone Maintenance Treatment (MMT) is often considered as an intolerable social behavior and an unacceptable medical practice. We studied all patients who were older than 65 years of age and were receiving MMT for their heroin addiction. Urine samples were randomly collected and screened for heroin for 12 months. The data was analyzed using Student t-test. There were 20 male patients who were  $67.35 \pm 2.87$  years old and had been on MMT for  $95.36 \pm 69.79$  months. They first used heroin at the age of  $25.05 \pm 9.61$  years and then continued for the next  $36.80 \pm 15.06$  years. After failing the detoxification for at least 1.55 times, they started the MMT. During the study period 15 patients had used heroin at some time, at the rate of  $11.10 \pm 11.19\%$ . These patients used to use heroin  $23.25 \pm 8.63$  days per month before starting the MMT, but now has used heroin only  $0.25 \pm 0.72$  days per month. Even though the MMT failed to produce absolute abstinence, it did significantly ( $p < 0.0001$ ) decrease the frequency of heroin use among geriatric addicts. Since the intravenous drug abuse is associated with acquiring and/or spread of numerous diseases, like HIV infection; even a small decrease in frequency of heroin use provides a significant impact in curtailing the morbidity and mortality among geriatric population. Thus harm reduction is a significant outcome of Methadone Maintenance Treatment.