related to the interference between neuroleptics and the dopamine reward system. The aim of the study presented above is to clarify the status of anhedonia in chronic schizophrenia by using a multivariate analysis (factor analysis). Method: Subjects and assessments: 150 subjects meeting the RDC criteria for chronic schizophrenia filled out the Fawcett Clark Pleasure Capacity Scale (FCPCS-PP). The Positive and Negative Syndrome Scale (PANSS) was completed by a clinician. Statistical analysis: a principal components analysis was performed on the intercorrelation matrix of the FCPCS-PP and PANSS items. The number of factors was determined using several guidelines (Kaiser, Cattell). Finally an orthogonal rotation (equamax) was made. Results: a 5-factor solution was retained including positive, disorganisation, negative, anxious-depressive and pleasure factors. The PANSS items were distributed respectively in the positive, negative, disorganisation and anxious-depressive factors; the FCPCS-PP items were distributed in the pleasure factor. No overlap between the different factors for the item loadings in each factor could be evidenced.

Conclusion: The results support the view that anhedonia is a construct that is distinct and separated from depression and negative symptomatology in chronic schizophrenia.

COGNITIVE DEFICITS RELATED TO ANHEDONIA

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Several studies using amplitudes of cognitive Event-Related-Potentials (ERP) as indices of arousal were realised in the perspective of the Sanders model of perceptico-motor information processing (1983) relating computational stages to energetical processes.

Three studies in good healthy subjects showed that ERP amplitudes depended upon the personality characteristics which were correlated with anhedonia. When anhedonia was correlated with depressogenic attitudes, subjects presented a cortical hyperarousal when stimulations were neutral but an hypoarousal after these same stimulations had acquired an affective quality, compared to non-anhedonic subjects, (Pierson et al 1987). When anhedonia/blunted-affect was correlated with high sensation seeking, the frontal ERP indices of orienting were of larger amplitude than in control subjects (Pierson et al, submitted). Another study showed that anhedonia could indeed be included into two different factors, the first one associating harm avoidance, lack of reward dependance and a reduction of some ERP amplitudes when intensity of stimuli increased (instead of an increase in non-anhedonic subjects), the second one associating anhedonia and novelty seeking (Pierson et al, in preparation). Two other studies on depressed patients indicated that patients who presented psychomotor retardation and anhedonia/blunted-affect showed abnormally low amplitudes for several ERP components compared to depressed patients with the same degree of depression but with other emotional characteristics (anxious agitation and impulsiveness). Depending on the complexity of the task, the amplitude reduction concerned only the frontal P3 component (P3a) in a simple task (Pierson et al, 1990, Partiot et al, 1994) or all ERP components in a complex task (Pierson et al, in press).

These results as a whole seem to indicate that anhedonia is not a unitary process. We propose a model which could allow to explain anhedonia by an inadequation between the actual and the optimal level of arousal provoked by stimulations. When the actual level of arousal is low, anhedonia would be due to an hyporeactivity to stimulations and would constitute a primary trait which, in the case of a high optimal level, might be compensated by the development of adaptive behaviors intended to increase arousal (nicotine taking, excessive sensation seeking for example). On the contrary, when the actual level of arousal is high and reflected by hyperactivity to stimulations, and if the optimal level is low, anhedonia or blunted-affect

could be developed secondary and constitute a protective adaptive behavior intended to decrease the actual level of arousal.

A NEW SCALE FOR MEASUREMENT OF HEDONIC TONE R.P. Snaith.

For purpose of more accurate research into the relation of hedonic tone to disorders, the need for a scale was recognised. The existing scales are long and distorted by cultural bias. It was considered that the new scale should briefly cover the following areas of pleasure response: social, interests, entertainment, personal appearance and appetite. It was realised that sexual response, exact items of food and alcoholic drinks should be excluded as grounds of age and ethnic bias of response. The analysis of a large number of items resulted in a 14-item scale with clear indicating abnormality. The scale is called the Snaith-Hamilton Pleasure Scale (SHAPS).

ANHEDONIA IN DEPRESSION: STATE OR TRAIT

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Anhedonia, the diminished ability to experience pleasure, was proposed by Klein (1974) to be the defining characteristic of endogenomorphic depression, and in DSM-III, anhedonia was the core symptom of melancholia. Studies using the Fawcett-Clark Anhedonia Scale, the Chapman Pleasure Scales, and more recent variants of these two instruments, have confirmed that patients experiencing a major depression are significantly more anhedonic than controls. Historically, anhedonia has also been considered to be a feature of the dysthymic subtype of chronic minor depression, but this has not yet been confirmed using formal measuring instruments. In animal models of depression, behaviour suggestive of anhedonia (subsensitivity to rewards) is seen following exposure to one of a variety of stressful situations, and can be completely reversed by chronic treatment with antidepressant drugs. Anhedonia can also be demonstrated in human volunteers following the induction of a mild depressive mood swing. These data indicate that anhedonia is associated with, and perhaps consequent on, the state of being depressed. Some studies of first-degree relatives and of recovered depressives suggest that anhedonia may also be a trait-like feature of depressive people. However it is difficult to rule out the possibility that these data are complicated by the presence of dysthymia and/or subclinical depressive symptomatology.

S89. Psychiatric education in Europe

Chairmen: G Christodoulou, F Caldicott

WHERE SHOULD WE GO FROM HERE?

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The likely impact of the European Board's work on training and education in psychiatry in European countries will be discussed.

The degree of specialisation in psychiatric services for patients, which is already quite variable across Europe, will be considered in view of the implications that this has for psychiatric training in our member states.

European Directives ensure that free movement of doctors is

possible. To what extent can psychiatric training by rotation or exchange be developed beyond the current limited movement of a small number of trainees for some of their training?

PSYCHIATRIC EDUCATION IN EUROPE, INTRODUCTION

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The teachings of Hippocrates and the "holistic" approach of the ancient Greek physicians and philosophers have been infiltrated through the Centuries in the French and German "schools" which were dominant in the 19th Century. A productive osmosis between these two schools was later extended to include the factual and experimental "Anglosaxon" approach.

Yet, European Psychiatry, is by no means homogeneous and the differences in psychiatric tradition in the various European countries are reflected in psychiatric education and practice.

Following the establishment of the European Community (Treaty of Rome, 1958) mutual recognition of basic and specialist medical qualifications has occurred (Directive 93/16/EEC/1993). This called for "harmonization" of psychiatric training among the European Union countries (and also the EFTA countries). For this purpose the European Board of Psychiatry was established in October 1992 as a working Committee of the Psychiatry Section of the UEMS. The purpose of this symposium is to present some of the surveys carried out by the Board and some of its basic recommendations.

PRESENT STATE OF POSTGRADUATE PSYCHIATRIC EDUCATION IN EU COUNTRIES

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Aim: To obtain a description of National Guidelines on Psychiatric Training in the countries of the European Union.

Method: Delegates of the "Union Européenne des Médecins Spécialistes" UEMS Section of Psychiatry representing 18 European countries were asked to fill in questionnaire on Psychiatric Training, according to the information contained in the National Training Guidelines of their country.

Results: Fifteen valid questionnaires were analysed. Results will be described under three headings: administrative and training requirements for entering psychiatric training, the content of the National Training Programmes and quality assurance.

Conclusion: Results are discussed in relation to the difficulties of harmonizing psychiatric training in EU. The main obstacles are the differences in the process of selection of trainees, the requirements to enter psychiatric training, the duration of training. The con-tents of the programmes are not sufficiently specified in some countries and this makes difficult any comparisons.

TRAINING IN PSYCHIATRY IN EUROPE — RECOMMENDATIONS OF THE EUROPEAN BOARD OF PSYCHIATRY

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At present, the concept of psychiatry and psychiatric training in Europe is changing. Due to highly different standards of specialty training in psychiatry in the respective European countries, there is a great need to harmonize psychiatric training requirements in Europe. This should contribute to the goal of achieving comparable and high standards of psychiatric training and patient care in all of Europe. The European Board of Psychiatry has formulated requirements for

the specialty of psychiatry. These include rules about recognition of teachers and training institutions, quality assurance, as well as selection procedures for and access to the training itself. Training duration should be five years. Theoretical training should include a structured training over four years, on average for four hours per week. All relevant aspects concerning diagnosis and therapy of psychiatric disorders should be taught. Psychotherapy training should be compulsory with one theoretical course per week (120 hours in total). Psychotherapeutic theory should include at least psychodynamic and cognitive-behavioral approaches. Personal therapeutic experience is highly recommended but not mandatory. A minimum of 100 hours of psychotherapy supervision should offer the trainee experience in different therapeutic approaches. Practical training must include alongside the normal clinical work, daily clinical supervision of minimum one hour per week (at least 40 hours/year).

The different activities of the trainee should be recorded in a logbook. Rotation in training should be compulsory including training in in-patient and out-patient settings.

The main objective of these requirements is to offer a multidimensional approach to diagnosis and therapy of psychiatric disorders based on biological psychiatry, psychotherapy and social psychiatry.

S90. Biomed II project: outcome of depression in Europe

Chairmen: G Wilkinson, O Dalgard

THE OUTCOME OF DEPRESSION IN EUROPE: THE EFFECT OF PERSON CENTRED PREVENTION IN URBAN AND RURAL SETTINGS

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This study has two objectives: to provide reliable and valid data on the prevalence, risk factors and outcome of depressive illness in rural and urban settings within the European community based on an epidemiological sampling frame; and to assess the impact of a person-centred preventive approach on the outcome of depression and on service utilisation and costs.

Six centres across the EU with expertise in mental health epidemiology and interventions are participating in this study. Suitable urban and rural areas have been identified in each centre. The sampling frame is adults aged 18-64, identified via primary care data bases or electoral registers. A two stage screening procedure has been adopted. Potential cases of depressive illness and depressive adjustment disorder are identified using the Beck Depression Inventory. Then detailed interviews are undertaken by mental health trained researchers. They use PSE10/SCAN to assign caseness against DSMIV and ICD10 criteria; they also assess co-morbidity, disability, genetic/familial susceptibility, psychosocial stressors, personality traits and cognitive factors; and assess provision, expectations and utilisation of local health care services. A randomised controlled trial of person-centred prevention is then undertaken for respondents identified as cases of depression/depressive adjustment disorder. This has three arms. 1: Individual intervention: a community mental health facilitator (MHF) provides individual training in cognitive problem solving approaches. 2: Group intervention: as above, but group rather than individual training in problem solving approaches. 3: A control group with no intervention from the research project. Subjects will be followed-up at