functions, but from recurring, deviant brain states interspersed between normal brain states.

S54-5
FUNCTIONAL ASYMMETRIES OF THE BRAIN IN SCHIZOPHRENIA

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Some of the most characteristical schizophrenic symptoms such as acoustic hallucinations and thought disorders are related to speech. Speech is a strongly lateralized brain function and is, like schizophrenia, exclusive for humans. Therefore, it is reasonable to hypothesize disturbances of language related brain areas to be at the basis of at least part of schizophrenic disorders. Accordingly, neuropathological and brain imaging studies have shown alterations of left temporal areas in schizophrenia. In event-related potential (ERP) studies, functional asymmetries of the brain electrical fields have been shown in schizophrenic patients. Based on a standard oddball paradigm, the P300 component of ERPs was investigated with 20-channel recordings in different schizophrenic subgroups. Pathological asymmmetries in the form of right-lateralized P300 peaks were found only in a subgroup of residual schizophrenics (Strik et al, Psychiat Res: Neuroimaging, 55: 153–166; 1993), while acute and remitting forms had normal P300 field configurations (Strik et al, Acta Psychiat Scand, 94: 471–476; 1996). The pathological asymmetry was correlated with impairments in verbal memory functions (verbal pairs test), but not with performance in the abstract control task (Heidrich and Strik, Biol Psychiat, 41: 327–335; 1997). Source localization of the P300 component with LORETA (Pascual-Marqui et al, Int J Psychophysiol, 18: 49–65; 1994) indicated relative hyperactivity of the right temporal lobe as an explanation for the pathological asymmetries in the surface potential. The results are interpreted as a support for the hypothesis that language-related brain functions are deficient in subgroups of schizophrenia and might be associated with compensatory contralateral activation.

S54-6
EEG FFT APPROXIMATION SOURCE LOCATIONS IN SCHIZOPHRENIA

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Imaging procedures are steadily gaining importance in psychiatric research. The morphology of the brain can be visualized by means of CT and MRI while cerebral blood flow and the cerebral metabolic state can be evaluated by PET. Neurophysiological methods not only have the advantage of being readily available in a clinical setting, but by now have reached a stage of allowing the estimation of intracerebral generators of electrical activity of the brain. In psychiatric diseases where alteration of background activity is of interest, the method of FFT-approximation allows the estimation of intracerebral EEG-generators in the frequency domain. In the present study we investigated 22 schizophrenic in comparison to 22 control subjects. Schizophrenic patients exhibited more anterior and superficial equivalent-dipoles in the beta-bands and a tendency of increased beta-activity was found. With increasing severity of schizophrenic symptoms, the equivalent-dipole in the beta1-band was localized more anteriorly and the dipole in the theta-band was localized more inferiorly. These new developments may allow a physiological interpretation of neurophysiological investigations similar to other functional imaging methods and consequently enhance the clinical relevance of the EEG in psychiatry in the future.

SEC55. Diagnostic tools for primary care in psychiatry

Chairs: P Bech (DK), C Pull (LUX)

SEC55-1
THE MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW

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The Mini International Neuropsychiatric Interview (MINI) is a short diagnostic structured interview designed to generate 17 DSM-IV or ICD10 axis I diagnosis. It systematically explores the presence of diagnostic criteria for current diagnosis within a 10–25 minutes period depending on the number of diagnoses presented by the patient. The reliability, sensitivity and specificity were explored in a clinical population versus the CIDI (Lecrubier *et al*, 1997) and versus the SCID (Sheehan *et al*, 1997). In both cases the performance of the MINI was equivalent to that of the longer interview. A multicenter trial organised in 4 different European countries compared the diagnoses generated by GPs using the MINI (after a very short training of 2–3 hours) and a specialised interviewer (psychiatrist expert with DSM diagnoses. For the 3 most frequent diagnoses, the concordance was: .68 for Major Affective Disorder, .62 for GAD and .66 for social phobia. Positive predictive values >.70 while negative predictive values >.90. therefore, very few false positive are likely to be generated by the GPs using the MINI. The screening questions of the different sections (passation: 5') did predict the existence of the full diagnosis in about 2/3 of cases. The GPs found the instrument to be easy to use. In parallel, a MINI plus version has been developed which comprises:
- different additional diagnoses to allow their optional introduction in a diagnostic assessment such as PTSD, PMS...
- a full exploration of psychotic disorders according to DSM-IV (7 diagnoses) while the very short core version only identifies the presence of a psychotic syndrome.

Overall, more than 100 studies and 20 departments currently use the MINI. The interview is translated (and back translated) in more than 30 different languages with a specific attention to semantic rather than to literal translation.

SEC55-2
A SPANISH VALIDATION STUDY OF THE MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW

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Aim: To determine the psychometric properties in terms of sensitivity, specificity, positive predictive value and negative predictive value of the Spanish version of the M.I.N.I. when diagnosis by the psychiatrist is used as the gold standard.

Patients and Methods: A total of 126 primary health care patients from two Spanish provincees (Asturias and Alava) were included. First evaluations were made by the general practitioner

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using the GHQ-12 and those scoring greater than 2 were then evaluated using the MINI. Following this those interviewed with the MINI were then evaluated by a psychiatrist within a 3-day period.

Results: Out of the total of 126 patients 78 scored greater than 2 on the GHQ-12. The mean age of these 78 patients was 47.8 (SD 16.4), 28.2% were male, 66.7% were married and 25.6% were employed. The diagnoses most frequently found on the MINI were major depression (50%) followed by generalised anxiety disorder (44.9%) and social phobia (17.9%). The most common diagnoses made by the psychiatrist were major depression (21.8%) followed by generalised anxiety disorder (16.7%) and dysthymia (16.7%). The sensitivity and the specificity of the most common diagnoses were major depression 94.1 and 62.2, generalised anxiety disorder 92.3 and 64.6, and social phobia 100 and 84.2 respectively. The positive predictive value and negative predictive for these disorders were as follows: major depression 41.0 and 97.4, generalised anxiety disorder 34.2 and 97.6, and social phobia 14.2 and 100 respectively.

Conclusion: The agreement between the MINI and the psychiatrist's diagnostic judgement may be considered as acceptable for the most prevalent disorders at the level of primary health care.

SEC55-3

THE MIND: AN UPDATE ON RATING SCALES FOR THE MINI COMPENDIUM

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During the 1970's the diagnostic criteria for mental disorders changed from an etiological principle (e.g. endogenous versus reactive depression) to a symptom-based principle. Thus, the Feighner criteria (Feighner et al 1972) introduced the screening diagnosis of mental disorders based on symptoms alone. A few years later the Research Diagnostic Criteria (Spitzer et al 1978) were released, which provided the foundation for the third edition of the Diagnostic and Statistical Manual for Mental Disorders (DSM-III, APA 1980). At the beginning of the 1990's the World Health Organization accepted the DSM-III principle when the tenth revision of the International Classification of Disease (ICD-10) was released (WHO 1993). However, both ICD-10 and DSM-IV (APA 1994) are still separated classification systems for mental disorders.

The MINI (International Neuropsychiatric Interview) developed by Sheehan and Lecrubier (1994) has both a DSM-IV and an ICD-10 version. The MINI was designed as a very brief structured interview for mental disorders to be used by clinicians after a brief training session. The MINI is mainly a tool for psychiatrists analogue to the PRIME-MD developed by Spitzer et al (1994) for general practitioners.

The objective of the MIND has been to offer quantitative assessments of mental disorders from DSM-IV or ICD-10 following as close as possible the MINI. The scales are all designed for clinicians (psychiatrists, psychologists, physicians as well as family doctors). The reference to DSM-IV or ICD-10 has been essential for the scale collection. It should be emphasized that this collection of rating scales is no attempt to replace MINI, DSM-IV nor ICD-10. The MIND is a collection of rating scales with a content validity equal to DSM-IV or ICD-10 but with a quantitative objective, e.g. to measure outcome of neuropsychiatric therapies.

SEC55-4

PRIME-MD: THE ICD-10 VERSION

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Aim of Study: To validate the Primary Care Evaluation of Mental Disorders (Prime-MD) diagnoses against ICD-10 diagnoses made by The Schedules for Clinical Assessment in Neuropsychiatry (SCAN) in patients commonly seen in primary care.

Methods: Current diagnoses were assessed by the Prime-MD and SCAN interviews in 36 women with somatoform disorders (fibromyalgia or functional dyspepsia) and 33 female random sample controls.

Results: Agreement and sensitivity showed great variability among the different diagnostic groups with highest degree of agreement and sensitivity for somatoform disorders and depressive disorder. Agreement and sensitivity was low for anxiety disorders (sensitivity = 0.36). Overall sensitivity for any psychiatric diagnosis was 0.41, specificity was 0.89. Specificity was high for all diagnostic categories and overall efficiency was good.

Comments: The validity of Prime-MD diagnoses in this population was good for depressive disorders, but not for anxiety disorders. This was mainly due to low sensitivity and might be related to the high prevalence of non fearful panic and somatized anxiety in this special population.

SEC55-5

PRIME-MD: FROM DSM-IV TO ICD-10

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It is well documented that primary care physicians constitute a low threshold service for patients suffering from mental disorders. For instance, panic disorder has a life time prevalence between 1 and 3% in the general population, but 7% of all patients attending general practitioners suffer from panic disorder, and some studies show that among frequent attendees of GPs the prevalence of panic disorder is over 20%. Yet knowledge and skills for recognising and treating mental disorders are not well developed in primary care and many patients suffering from depression, anxiety disorders and substance abuse remain undiagnosed - and therefore untreated. PRIME-MD (= Primary Care Evaluation of Mental Disorders) is a structured tool, tailored to assist the busy general practitioner in recognising the most common mental disorders among patients attending their surgery. After a short training period most GPs can use PRIME-MD reliably. It takes between 8 to 10 minutes to arrive at a diagnosis. The presently available DSM-IV version covers 5 diagnostic groups: major depression, anxiety disorders (panic disorder and generalised anxiety disorder), alcohol abuse, eating disorders and somatoform disorder. The system consists of a one page screen form, which the patient may fill in as a self-assessment device (but which can alternatively be used in the form of assisted self-rating). It takes 3 minutes on average to apply this screening sheet. In a second step, the GP carries out a short structured interview covering only those modules, which get a positive rating in the screening questionnaire. This interview takes around 5–8 minutes, depending on the number of suspected disorders. The application of PRIME-MD to 1000 GP patients in the US has shown that it is feasible to use the instrument in routine work and that it is valid when compared to diagnoses made by mental health

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