Cologne, Cologne, Germany [2] Department of Psychiatry and Psychotherapy, University of Bochum, Bochum, Germany [3] Department of Psychiatry, University of Turku, Turku, Finland [4] Department of Psychiatry, University of Amsterdam, Amsterdam, The Netherlands [5] Early Intervention Service, University of Birmingham, Birmingham, UK [6] Department of Psychology, University of Manchester, Manchester, UK [7] all departments

Background: One aim of the European prediction of psychosis study (EPOS) has been to evaluate the clinical course of putatively prodromal patients in terms of psychopathology.

Methods: 245 patients at risk for psychosis defined by attenuated positive symptoms, brief limited psychotic symptoms, a state/ trait combination or cognitive-perceptive basic symptoms was recruited in six centres in four countries. The Structured Interview for Prodromal Syndromes (SIPS) and the Bonn Scale for the Assessment of Basic Symptoms – Prediction List (BSABS-P) were employed. Follow-up was scheduled after 9 months (t1) and 18 months.

Results: In total, 40 patients developed a psychosis (P). Compared to those without a transition (NP), P showed significantly higher SIPS scores at baseline. The same applied to the BSABS-P sub-scores 'cognitive perception disturbances' and 'cognitive motor disturbances'. The P sub-group developing psychosis after t1 showed no significant change of the SIPS positive (SIPS-P) sub-score or of any BSABS-P score from baseline to t1, whereas all scores improved in the NP group. At t1, SIPS-P and BSABS-P sub-score 'cognitive thought disturbances' were significantly lower in those later becoming psychotic.

Conclusion: Patients at risk showing a transition to psychosis during exhibited a pronounced psychopathology at baseline. Also, the positive symptom scores did not significantly improve during 1st follow-up, whereas those patients with no transition during the complete follow-up showed an improvement of all scores. As EPOS is a naturalistic study, different treatments have been performed in a considerable portion of the patients and association with course awaits further analysis.

S55.02

Subjective quality of life and its changes in patients at risk of psychosis

R.K. Salokangas [1], M. Heinimaa [1], T. Svirskis [1], J. Klosterkoetter [2], S. Ruhrmann [2], H. Graf von Reventlow [2], D.H. Linszen [3], P.M. Dingemans [3], M. Birchwood [4], P. Patterson [4], G. Juckel [5], A. Morrison [6], the EPOS Group [1,6]. [1] *Psychiatric Clinic, University of Turku, Turku University Hospital, Turku,, Finland [2] Department of Psychiatry and Psychotherapy, University of Cologne, University Hospital of Cologne, Cologne, Germany [3] Academisch Psychiatrisch Centrum, Academic Medical Centre, Adolescentenkliniek, Amsterdam, The Netherlands [4] Early Intervention Service, University of Birmingham, Birmingham, UK [5] Department of Psychiatry, Ruhr-University of Bochum, LWL-Klinik, Bochum, Germany [6] Department of Psychology, Victoria University of Manchester, Manchester, UK*

Objectives: The European Prediction of Psychosis Study (EPOS) aimed to study a large sample of young patients who are at risk of psychosis and to estimate their conversion rate to psychosis during 18 months follow-up. This presentation describes quality of life and its changes in patients at risk of psychosis.

Methods: In six European centres, 16 to 35 year old psychiatric patients were examined. Risk of psychosis was defined by occurrence of basic symptoms, attenuated psychotic symptoms, brief, limited or intermittent psychotic symptoms or familial risk plus reduced functioning. Quality of life (QoL), measured by the Modular System for Quality of Life, was assessed at baseline and at 9 and 18 months' follow-ups. Psychiatric patients without prodromal symptoms and healthy subjects were comparison groups.

Results: In all, 245 risk patients were included. At baseline, they reported lower QoL than non-risk patients and healthy controls. Basic symptoms associated negatively with QoL, and there were differences between the study centres. During the follow-up, QoL raised less in risk patients than in non-risk patients. Baseline QoL did not predict transition to psychosis. However, its development was poorer in patients with than in those without transition to psychosis.

Conclusions: Those of the psychiatric patients who are at risk of psychosis have lower QoL than other psychiatric patients or healthy controls. QoL does not predict transition to psychosis, but its changes correlates with changes in clinical state. The results indicate that there is a need for comprehensive intervention with the patients at risk of psychosis.

S55.03

Transition to psychosis: Neuropsychological test results of the epos study

D.H. Linszen [1], D.H. Nieman [1], H.E. Becker [1], J.R. van de Vliert [1], P.M. Dingemans [1], J. Klosterkoetter [2], M. Birchwood [3], R.K. Salokangas [4], S. Ruhrmann [2], G. Juckel [5], A. Morrison [6], P. Patterson [3], M. Heinimaa [4], H. Graf von Reventlow [2], the EPOS Group [1,6]. [1] *Academisch Psychiatrisch Centrum, Academic Medical Centre, Adolescentenkliniek, Amsterdam, The Netherlands [2] Department of Psychiatry and Psychotherapy, University of Cologne, University Hospital of Cologne, Cologne, Germany [3] Early Intervention Service, University of Birmingham, Birmingham, UK [4] Psychiatric Clinic, University of Turku, Turku University Central Hospital, Turku, Finland [5] Department of Psychiatry, Ruhr-University of Bochum, LWL-Klinik, Bochum, Germany [6] Department of Psychiatry, Victoria University of Manchester, Manchester, UK*

Introduction: Both schizophrenia and ultra high risk (UHR) patients show reduced neurocognitive performance compared to matched healthy control subjects. In the current study we compared neurocognitive performance at baseline and follow up between UHR patients who made the transition to psychosis and patients who did not.

Method: Patients were eligible for the study when they met criteria for one or more of the following groups: Attenuated symptoms or brief limited intermitted psychotic symptoms or a first degree family member with a psychotic disorder and reduced functioning or basic symptoms. We assessed 216 UHR patients (166 males, mean age: 22,6 SD 5,2) with a neuropsychological test battery composed of the National adult reading test (premorbid IQ), California verbal memory test (verbal memory), spatial working memory test, verbal fluency first letter and categories (executive functioning), finger tapping test (motor speed) and continuous performance test (sustained attention). Data were collected in 7 participating centres of EPOS. Follow up was at 9 months.

Results: 37 UHR patients made the transition to psychosis (25 males, mean age 21,5 SD 4,8). The only test that showed a significant difference between the transition and non transition group at baseline was verbal fluency categories ($t = 2.79$, $p = 0.006$).

Conclusion: Patients who later make the transition to psychosis perform significantly worse on verbal fluency categories than patients

https://doi.org/10.1016/j.eurpsy.2008.01.248 Published online by Cambridge University Press

who do not make the transition to psychosis. Verbal fluency may contribute to an improved prediction of psychosis in UHR patients. Follow up results will also be presented.

S55.04

The perception of expressed emotion in young people at high-risk of psychosis

P. Patterson [1], M. Birchwood [1], A. Skeate [1], J. Klosterkoetter [2], S. Ruhrmann [2], H. Graf von Reventlow [2], R.K. Salokangas [3], M. Heinimaa [3], D.H. Linszen [4], P.M. Dingemans [4], G. Juckel [5], A. Morrison [6], the EPOS Group [1,6]. [1] *Early Intervention Service, University of Birmingham, Birmingham, UK* [2] *Department of Psychiatry and Psychotherapy, University of Cologne, University Hospital of Cologne, Cologne, Germany* [3] *Psychiatric Clinic, University of Turku / Turku University Central Hospital, Turku, Finland* [4] *Academisch Psychiatrisch Centrum, Academic Medical Centre, Adolescentenkliniek, Amsterdam, The Netherlands* [5] *Department of Psychiatry, Ruhr-University of Bochum, LWL-Klinik, Bochum, Germany* [6] *Department of Psychology, Victoria University of Manchester, Manchester, UK*

Objectives: The European Prediction of Psychosis Study (EPOS) involved a large (n=245) sample of young individuals at high-risk of developing psychosis. Participants appraisals of criticism and emotional over-involvement were described employing the Level of Expressed Emotion (LEE) measure. This presentation explores results and implications over an 18 month follow-up period.

Methods: Across six European centres, n=245 patients aged 16 – 35 years and ascertained to be at high-risk of developing psychosis were assessed over a period of eighteen months. Risk of psychosis was defined by occurrence of basic symptoms, attenuated psychotic symptoms, brief, limited or intermittent psychotic symptoms or familial risk plus reduced functioning. Appraisals of familial expressed emotion from participants towards key family members were examined for relationships to risk of transition to psychosis, psychotic symptomatology and demographical data.

Results: Individuals at high-risk of psychosis were included and compared on the five sub-scales of LEE. Levels of Criticism, Irritability, Intrusiveness and Lack of emotional support were examined with significant correlations found between patient-perceived intrusive over-involvement and depression as well as between sub-scales of LEE and positive symptoms of psychosis. Transition to psychosis was not predicted by LEE in participants.

Conclusions: Perceived LEE of significant others by individuals at high-risk of developing psychosis may have a role in the maintenance of both affective and positive psychotic symptoms prior to the onset of full psychosis. Further explorations of the impact of EE appraisal on developing psychotic symptoms may inform potential targets for therapeutic intervention in both at-risk individuals and family members.

Symposium: Neuropsychobiology of inhibitory deficits in schizophrenia: An update

S57.01

Antisaccade deficits in subjects either genetically or clinically at risk for schizophrenia

M. Wagner [1], N. Petrovsky [1], J. Brinkmeyer [2], W. Woelwer [2], A. Bechdolf [3], S. Ruhrmann [3], J. Klosterkoetter [3], W. Maier [1], I. Frommann [1]. [1] *Department of Psychiatry, University of Bonn, Bonn, Germany* [2] *Department of Psychiatry, University of Duesseldorf, Duesseldorf, Germany* [3] *Department of Psychiatry, University of Cologne, Cologne, Germany*

Background and Aims: Disturbances of the oculomotor system are promising endophenotypes for schizophrenia. In two separate studies, we examined antisaccade task performance, a measure of inhibitory control, in first degree relatives of schizophrenic patients (genetic risk without manifest disorder) and in clinical high risk subjects with symptoms suggestive of a prodromal phase of schizophrenia.

Methods: In the first study, 41 parents of schizophrenia patients and 22 controls were tested with with a prosaccade task and an antisaccade task. Parents were grouped into more likely, less likely, and indeterminate risk carriers. The second study involved 160 subjects clinically at risk for schizophrenia, 32 first episode schizophrenic patients, and 76 healthy controls.

Results: In study 1 we found an increase of antisaccade latencies and error rates in parents of schizophrenics which varied with inferred genetic load, more likely gene carriers performing worst. In study 2, antisaccade performance varied with symptom load: subjects at risk with basic symptoms only were unimpaired, while at-risk subjects who had experienced brief psychotic episodes (BLIPS) showed deficits similar to first episode patients.

Conclusions: Reduced inhibitory control of oculomotor performance is associated with genetic loading for schizophrenia, and also with symptoms placing subjects at imminent risk of psychosis.

S57.02

Imaging and pharmacological studies of oculomotor inhibition

U. Ettinger. *Institute of Psychiatry, London, UK*

The antisaccade task is a model of the conflict between an unwanted reflexive response (which must be inhibited) and an appropriate volitional response (which must be generated). In this talk I will present a study of the neural correlates of these cognitive components separately using a delayed saccade paradigm to dissociate saccade inhibition from generation. Event-related functional magnetic resonance imaging (fMRI) was carried out in healthy human volunteers. It was found that the right supramarginal gyrus showed significantly greater activation during response inhibition compared to response generation, suggesting a role in saccade inhibition or stimulus detection. The right lateral frontal eye field and bilateral intraparietal sulcus showed evidence of selective involvement in antisaccade generation. Ventrolateral and dorsolateral prefrontal cortices showed comparable levels of activation in both phases of the task. These areas likely fulfil a more general supervisory role in the volitional control of eye movements, such as stimulus appraisal, task set, and decision making. The findings will be discussed in relation to data suggesting that antisaccade deficits constitute an endophenotype for schizophrenia and in relation to pharmacological studies of brain function during antisaccade eye movements.

S57.03

Prepulse inhibition as a marker of prefrontal function: Studies in healthy individuals

P. Bitsios. *Department of Psychiatry and Behavioural Sciences, University of Crete, Heraklion, Greece*

https://doi.org/10.1016/j.eurpsy.2008.01.248 Published online by Cambridge University Press