

increases with age. In males, in addition to age, other factors have a significant effect on the occurrence of somatic diseases.

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P.3.a.002 Symptomatic remission in schizophrenia patients: relationship with social functioning, quality of life, and neurocognitive performance

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Purpose: In 2005, a consensus definition of symptomatic remission in schizophrenia was proposed, and specific operational criteria for its assessment were developed [1]. It was pointed out, however, that the validity of these criteria and the relationship to other outcome measures required further research. Studies have demonstrated that these remission criteria appear achievable and sustainable for a significant proportion of patients, being related to a better overall symptomatic status and functional outcome and, to a less clear extent, to a better quality of life (QoL) and cognitive performance [2]. A recent study has evaluated social functioning, QoL, and cognition in remitted versus non-remitted schizophrenia patients [3]; however, their patient population comprised older patients.

In the present study, we sought to investigate whether remitted schizophrenia community patients presented better social functioning, better QoL, and better neurocognitive performance, as compared to non-remitted patients.

Methods: Seventy-six schizophrenia patients living in the community were assessed using measures of symptomatic remission, depressive symptoms and insight, alongside measures of social functioning, subjective QoL, and neurocognitive measures of executive function, processing speed and verbal memory.

Results: The main results of our study were that remitted patients showed better social functioning and self-reported QoL than their non-remitted counterparts, but neurocognitive performances were similar for both these schizophrenia groups. The majority of patients (56; 69.7%) were not in remission. The majority of patients were single (78%), unemployed/inactive (74%), and only 6 (7.9%) had never been hospitalized.

Remitted patients presented significantly better social functioning and self-reported better QoL. They also presented lower levels of depressive symptoms and better insight levels. Contrary to our expectation, remitted patients showed a trend for better neurocognitive performance, but the differences were not statistically significant.

Sample size, assessment of cognitive function with a limited number of tests, and the cross-sectional nature of the study pose some limitations. Strengths of the study include the simultaneous evaluation of mood, social functioning, subjective QoL and neurocognition, in a sample of adult schizophrenia patients, where

schizoaffective and other psychotic disorders were excluded. The use of the PSP scale is innovative, and shows that remission is mainly associated with social aspects of functioning (and not so much to behavioral aspects).

Conclusions: Our findings indicate that the severity criteria of symptomatic remission seem to be a good indicator of better clinical status, social functioning and QoL. However, this does not necessarily mean that remitted patients have an “adequate” QoL or functioning level. Conversely, remission criteria would not be such a good proxy for cognitive functioning.

Nevertheless, our results support that remission is a necessary but not sufficient step towards recovery. The associations of symptomatic remission to functional status, QoL, and neurocognition should be assessed simultaneously in future studies and clinical trials by means of adequate measures for each of these treatment outcomes of schizophrenia.

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P.3.a.003 Abnormal local and long-range functional connectivity in schizophrenia during ultimatum game

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Purpose: Schizophrenia is among the most severe of psychiatric disorders, leading to impairments of both cognitive and emotional processes. Decision-making in these patients appears to be impaired in terms of the ability to use reward feedback to guide behavior in tasks including the Iowa gambling tasks and probabilistic decision-making tasks. However, few studies have evaluated decision-making ability in patients with schizophrenia in the context of complex social interactions. In this study, we investigated decision-making requiring conflict processing in the context of emotion and cognition and fairness monitoring towards social valuation in schizophrenic patients. Our chosen tool is the Ultimatum Game. Furthermore, during ultimatum game, EEG was recorded to investigate local and long-range cortical disconnections or dysfunctions in schizophrenic patients and then to assess the underlying dynamics and functional connectivity between certain brain regions.

Methods: Sixteen male patients with chronic schizophrenia and 16 healthy male control subjects participated in this study. Schizophrenic patients were recruited from the Department of Psychiatry at Bugok National Hospital. Healthy controls were recruited from the local community. The schizophrenia group comprised chronic inpatients and outpatients who were functionally stable and without florid psychotic features at the time of testing. The schizophrenic patients were taking stable dosages of

atypical (risperidone, 9; aripiprazole, 1; olanzapine, 1; clozapine, 1; amisulpride, 1; amisulpride and risperidone 1) and typical (haloperidol, 2) antipsychotics. EEG from 16 male schizophrenic patients and 16 male control subjects was recorded while the individuals played the Ultimatum Game. We estimated the time-frequency spectrum and phase synchrony of the EEGs from each responder.

Results: We found that the responders accepted most fair offers, with decreasing acceptance rates in both groups as the offers became less fair. More interestingly, unfair offers of \$1 to the schizophrenic patients were accepted at a significantly higher rate than identical offers to the control subjects. β and γ frequency oscillations were decreased in right and increased in left hemisphere 300 ms before the rejection, indicating a failure of correct lateralization contributing to social interaction deficits in schizophrenic patients. We also observed abnormal γ frequency oscillations 400 ms after the acceptance, indicating hypersensitivity to reward in schizophrenic patients. Long range γ band synchronizations in fronto-central and temporo-parietal regions were also decreased during decision-making in schizophrenic patients in the time window -400 – 400 ms.

Conclusions: The reported findings support the notion that impaired local and long range synchronization can both establish underlying mechanisms of dysfunctional complex decision-making in schizophrenic patients. The present study demonstrates for the first time that not only communication between the long-range cortical regions but also the integration within functionally specialized regions of the cerebral cortex is important when schizophrenic patients make complex social decisions. We believe that our study opens the door to new investigations of social-cognitive decision-making that is relevant to real-life scenarios.

P.3.a.004 **First episode psychosis patients show impaired executive function as assessed by the Cambridge neuropsychological test automated battery**

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Introduction: Cognitive impairments seen in patients experiencing a first episode in psychosis are often similar to those seen in patients with chronic illness [1]. Patients experiencing a first episode show profound deficits in memory, attention and executive function [2]. Deficits in executive function include difficulties in set shifting, abstraction and response to feedback which all contribute to a patient's inability to cope with everyday activities and the ability to adapt to new situations [3].

The aim of this study is to investigate potential deficits in executive function in a sample of first episode patients using CANTAB.

Methods: 30 patients were recruited into the study, examining the cognitive function of first episode patients. All patients were recruited from the Bradford District Care Trust through the Early Intervention in Psychosis Service. Patients completed questionnaires and neuropsychological tests which included the Wechsler Test of Adult Reading (WTAR) a measure of pre-morbid IQ, the Positive and Negative Syndrome Scale (PANSS), which is a measure of symptom expression and the CANTAB, a comprehensive battery of tests examining different cognitive domains. In this study we focused on the test used to assess executive

function – Intra-Extra Dimensional Set Shift (IED). The IED test is a computerised version of the Wisconsin Card Sorting Test and is sensitive to cognitive deficits associated with schizophrenia. The test is language independent and includes visual discrimination, maintenance, shifting and flexibility of attention.

15 demographically matched healthy controls with no history of mental illness were also recruited as a comparison group. Both groups underwent the same procedures under identical conditions with the exception of the PANSS for the control group.

Results: We found profound deficits in executive functioning in patients who have experienced a first episode in comparison to healthy controls, even when the groups were matched for pre-morbid IQ scores and years of education. See table 1 for outcome measures of test.

Table 1. Results of outcome measures for the ID/ED test on CANTAB

IED Outcome measure	Mean \pm SD		F	P
	Patient	Control		
Stages complete	7.8 \pm 0.9	8.7 \pm 0.7	11.8	<0.001*
Total errors	30.5 \pm 14.4	12 \pm 7.8	21.2	<0.001*
Total errors adjusted	43.8 \pm 22.6	15.4 \pm 16.3	18.7	<0.001*
Completed stage errors	12.8 \pm 9.5	8.7 \pm 2.5	2.6	0.1
Completed stage trials	67.5 \pm 21	64.8 \pm 9.7	0.2	0.6
EDS errors	18.1 \pm 10.9	6.2 \pm 8.8	13.2	<0.001*
Pre EDS errors	8.1 \pm 8.2	5 \pm 1.3	1.9	0.2
Total trials	100.8 \pm 25.3	70.8 \pm 8.9	19.5	<0.001*
Total trials adjusted	127.5 \pm 39.9	76.8 \pm 23.9	20.3	<0.001*

*Significant difference.

Conclusions: We report deficits across six outcome measures of the test. Significant impairments were seen on the errors group outcome measures with patients performing significantly worse on all outcomes besides the Pre EDS Errors measure. There were also impairments seen on the number of trials and stages completed measures, with significant differences in the total stages completed measure. The results highlight the significant impairments in executive function in first episode patients.

This study is the first to look at all outcome measures across the CANTAB ID/ED test in first episode psychosis patients.

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P.3.a.005 **Prevalence of pain and its correlation to depression: a cross-section study in major depressive patients**

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Objective: Pain is common in patients with depression. However, only limited evidence is available in Asian populations. The authors proposed to examine the prevalence and severity of pain, number of pain sites, and correlation between pain and depression in Thai patients with major depressive disorder.

Method: This case-control study was conducted in adult outpatients with DSM IV major depressive disorder (MDD) visit the