

voluntarily admitted patients who said they came to the hospital involuntarily were 13% in Denmark, 8(3–18)% in Finland, 11% in Iceland, 17(8–21)% in Norway and 5(3–9)% in Sweden.

**Preliminary conclusion:** The degree of discrepancy between legal status and patients' perceptions of coercion differed between countries and institutions within countries.

### S58.5

Measurements of perceived coercion; methodological problems

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Several studies suggest that the patient's experience of being coerced during the admission to mental hospitals, does not necessarily correspond with their legal status. Instruments have been developed to measure perceived coercion, but their validity has not been thoroughly addressed. This paper compares two different ways of measuring perceived coercion used in a large scale study on the use of coercion in the Nordic countries. The instruments used in the study were the MacArthur perceived coercion scale, (which is a part of the frequently used Admission Experience Scale; AES) and a visual analogue scale, called the coercion ladder. The two ways of measuring perceived coercion are compared, and predictors of perceived coercion are determined for each of the two methods.

## S59. Schizophrenia as a disorder of information processing

*Chairs:* C. Höschl (CZ), J. Libiger (CZ)

### S59.1

The role of 5-HT activity in anti-psychotic treatment

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No abstract was available at the time of printing.

### S59.2

Brain metabolism (PET) and cognitive performance in schizophrenia

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Patients with schizophrenia demonstrate cognitive dysfunction and the abnormalities in resting state of brain glucose metabolism. In order to determine whether the regional brain metabolism predicts the performance in neuropsychological tests we assessed patients (N=38) with schizophrenia with 18FDG positron emission tomography (PET) and neuropsychological tests. Regional brain

metabolism was measured in the resting state and was tested for correlation with performance in neuropsychological tests and domains of psychopathology.

Total PANSS score negatively correlates with decrease of metabolism in insular regions, left caudatum and left dorsal temporal region. Positive symptoms are associated with the decrease of metabolism in basal ganglia and temporo-parietal cortex. Negative symptoms are mostly associated with the decrease of prefrontal and caudate metabolism. We found the association between the outcome in WCST and metabolism in dorsal prefrontal cortex, verbal fluency and prefrontal and fronto-temporal cortex and trail making test and frontal and dorsal angular region.

Results are presented and discussed in the framework of a neuronal basis for cognitive dysfunction in schizophrenia.

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### S59.3

Neuropsychological dysfunctions in the families of schizophrenic patients

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Abnormalities of information processing in schizophrenic patients are reflected in the results of neuropsychological tests measuring cognitive processes. Furthermore, these abnormalities have been reported to exist in a proportion of apparently healthy relatives of schizophrenic patients. The aim of this study was to compare the results of neuropsychological tests, measuring mainly the frontal lobe function in first-episode 21 schizophrenic patients, in both their parents (20 mothers and 20 fathers) and in 20 parent-matched healthy controls. Neuropsychological tests comprised the Trail Making Test (TMT), the Stroop color-word interference test, and the Wisconsin Card Sorting Test (WCST). There was a significant difference between the 21 patients and their healthy parents in the results of TMT and WCST but not in the Stroop test. On the other hand, a significant difference between parents and their matched controls was found in the Stroop B, and in two indices of the WCST (completed categories, CC and percentage of conceptual level responses, %CONC). A correlation was obtained between patients and their fathers in two indices of WCST (CC and %CONC), but not between patients and their mothers. The results obtained confirm those of other studies pointing to the presence of a significant impairment on neuropsychological tests in first-degree nonpsychotic relatives (parents) of schizophrenic patients, which may be used as an endophenotypic markers of genetic predisposition to schizophrenia.

### S59.4

Computer-assisted rehabilitation of cognitive functions in schizophrenia

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Computers have become a part of rehabilitation of cognitive functions in schizophrenia. Computerized training programs are used to improve performance in hospitalized patients and serve as a sensitive measure of recovery. The paper discusses options of computer rehabilitation in a general psychiatric population with special focus on schizophrenia. We review the published studies on ecological validity and efficacy of computer-assisted rehabilitation.