

Canadian Community Antistigma Questionnaire during 3 mental health lectures for nurses.

Results: Out of total of 166 nurses, 74.7% (124) of them has heard something about schizophrenia in the last couple of months. 45.8% (76) of nurses was employed at the institution that treated patients with mental illness. 34.3% (57) of nurses personally knew someone who was diagnosed with schizophrenia or were treated for schizophrenia themselves. The results have shown an extensive knowledge of the facts related to schizophrenia among the nurses in our local community. It has also emerged that the attitude to the person with schizophrenia is more negative, and the level of stigma is higher as the higher emotional involvement is required.

Conclusion: Medical staff has a good level of knowledge about schizophrenia. Emotional acceptance of the person with schizophrenia is lower as the closer contact is required. Because the results show a certain degree of stigma to schizophrenia in the population of nurses in our local community, it would be necessary to develop specific anti-stigma programs for medical staff.

The Danish OPUS-trial: RCT of standard treatment versus integrated treatment in first episode psychosis. 5 years follow-up

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Aim: To evaluate the effects of integrated treatment for first-episode psychotic patients.

Method: In a randomised clinical trial of 547 first-episode patients with schizophrenia spectrum disorders, effects of integrated treatment and standard treatment was compared. The integrated treatment lasted for two years and consisted of assertive community treatment with programmes for family-involvement and social skills training. Standard treatment offered contact with a community mental health centre. Patients were assessed at entry and after one, two and five years by investigators that were not involved in treatment.

Results: At the one-year and two-year follow-up psychotic and negative symptoms changed in favour of integrated treatment. Patients in integrated treatment had significantly less co-morbid substance abuse, better adherence to treatment, and more satisfaction with treatment. Use of bed days was 22 percent less in integrated treatment than in standard treatment. Results of five-year follow-up will be presented.

Conclusion: Integrated treatment improved clinical outcome and adherence to treatment. The improvement in clinical outcome was consistent in the one-year and two-year follow-ups.

Outcome and its predictors in schizophrenia - The northern Finland 1966 birth cohort

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Background and aims: Follow-up studies of schizophrenia have reported divergent rates of outcomes. In addition to definition and

measurement challenges, one reason for divergence may be due to sampling biases. Our aim was to report clinical and social outcomes of schizophrenia in the longitudinal, unselected, population-based Northern Finland 1966 Birth Cohort, and describe associated factors.

Methods: Subjects with DSM-III-R schizophrenia (N=109) were followed prospectively from mid-pregnancy up to age 35 years. Used outcome measures were positive and negative symptoms, global clinical impression, use of antipsychotics, psychiatric hospitalisations, social and occupational functioning. Several definitions of good and poor outcomes were explored, and predictors of outcomes were analysed.

Results: In a subsample of 59 cases with complete information of outcomes, good clinical outcome varied from 10% to 59%, and good social outcome 15-46%, depending on definition of outcomes. Poor clinical outcome varied 41-77% and poor social 37-54%. Two subjects recovered fully using the most stringent definition of outcome. Lack of friends in childhood, father's high social class, lower school performance and earlier age of illness onset predicted poor outcomes. When the whole sample was considered, early infant development around the age of 1 year was associated with worse course of illness.

Conclusions: Outcomes were heterogeneous and relatively poor in this sample of relatively young schizophrenia subjects. The results were influenced by the definitions and measurements of outcomes. Persons having a sub-optimal developmental trajectory with poor social contacts, poor school performance, and early age of illness onset seem to have the worst outcome.

Familial risk and prodromal features of psychosis in adolescents aged 15-16 years in the northern Finland 1986 birth cohort

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Background and aims: Subjects with family history of psychosis and with prodromal symptoms are at risk for schizophrenia. The aim was to study whether adolescents with familial risk have more commonly prodromal features.

Methods: Members (N= 9,215) of the Northern Finland 1986 Birth Cohort, an unselected general population cohort, were invited to participate in a field survey conducted during 2001-2002. At the ages of 15-16 years, the study included a 21-item PROD-screen questionnaire developed for screening prodromal psychotic symptoms with 12 specific questions for psychosis (Heinimaa et al. 2003). The scale measured symptoms for last six months. The Finnish Hospital Discharge Register was used to find out parental psychoses during 1972-2000.

Results: Of the males 24% and 37% of the females were screen positives for prodromal features at the age of 15-16 years. Of the offspring, 1.8% had parents with psychosis. The prevalence of screen positives was 26% in males and 36% in females with familial risk for psychosis.

Conclusion: Prodromal features of psychosis are prevalent in adolescence. It may be difficult to screen adolescent subjects at risk for developing schizophrenia with a questionnaire in a general population, especially as these symptoms do not appear to be more common among subjects with familial risk.

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References

- Järvelin M-R et al. (1993); *Br J Obst Gyn* 100: 310-315
 Heinimaa M et al. (2003); *Int J Methods Psychiatric Res* 12(2): 92-104

The efficacy of weight management training in patients with schizophrenia

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Introduction: In this study, we want to evaluate the efficacy of a preventive weight management training. We hypothesize that this training will reduce weight gain, pathological metabolic parameters and will increase drug compliance and subjective well-being.

Method: 69 schizophrenic patients were included in this study, in all patients olanzapine was newly initiated. They were randomly assigned to verum and control group. Patients in the verum group attended the training every second week for 24 weeks. Physical and chemical parameters were measured regularly, and also eating behaviour, physical activity, quality of life, mental state and psychosocial adaptation.

Results/Discussion: 28 patients dropped out during the first 4 weeks of intervention. The data of the remaining 41 patients (verum group N=21, control group N=20) was analysed. During the intervention there was no significant difference between the groups regarding weight-gain. Both groups gained weight slightly (verum group 3.02 ± 4.06 kg, control group 2.80 ± 4.84 kg). Concerning triglycerides we found an interaction effect of time and group ($F(1)=6.697$, $p=.025$), the same was found on the second scale of the questionnaire for eating behaviour (FEV), which measures to what degree eating behaviour is disturbed ($F(1)=8.381$, $p=.013$) and on the social functioning scale of the SF-36 ($F(2,38)=3.34$, $p=.032$). Regarding glucose tolerance challenge, there was a significant group effect at the first time of measure after intake of the glucose-dilution ($F(1)=9.15$, $p=.016$). Our results do not support the hypothesis that the intervention has the desired effects on body weight, but it influenced positively other metabolic parameters, eating behaviour and social functioning.

Near-infrared spectroscopy for the guidance of inhibitory rTMS treatment of auditory verbal hallucinations in schizophrenic patients

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Background and aims: Auditory verbal hallucinations (AVHs) are among the most frequent and disabling symptoms of schizophrenic diseases. In approximately one quarter of patients, AVHs have to be considered as therapy-refractory with regard to pharmacological

treatment options. This group of patients may benefit from a treatment protocol with repetitive Transcranial magnetic stimulation (rTMS) aiming on an inhibition of AVH-associated increased activity of auditory brain areas in the temporal cortex. However, optimal protocols for the guidance and control of such innovative treatment regimens are still lacking.

Methods: We propose the application of a non-invasive optical imaging technique (functional Near-Infrared Spectroscopy; fNIRS) for the measurement of the AVH-related activity of the auditory cortex, for the guidance of the rTMS-treatment and for the control of a treatment success on the brain metabolic level.

Results: In the reported patient, NIRS measurement indicated AVH-related activity in the left auditory cortex which strongly decreased after a period of three weeks with daily inhibitory rTMS treatment, in parallel with drastically diminished AVHs.

Conclusions: This is the first report of a NIRS-guided and -controlled inhibitory rTMS treatment of therapy-refractory AVHs in a schizophrenic patient. Given the excellent clinical applicability of the applied methods, the combination of fNIRS and rTMS might have the potential to establish new treatment options in psychiatry aiming on the modulation of pathological regional brain activity patterns.

The effect of long term treatment with olanzapine on neuropsychological prefrontal test in schizophrenia

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Background: Neuropsychological studies show the positive effect of treatment with atypical neuroleptics on cognitive functions in schizophrenia. The aim of this study was to assess the effect of olanzapine on prefrontal functions during 12-months of treatment in schizophrenia.

Methods: The study was performed in 48 schizophrenic patients, aged 20-48, who were treated with the generic olanzapine (Zolafren - Adamed, Poland). Psychometric evaluation was done using PANSS. Neuropsychological assessments included Wisconsin Card Sorting Test (WCST) and Trail Making Test and Stroop Color-Word Interference Test. The measurements were performed before, after 3, 6 and 12 months of treatment. The daily dose of olanzapine was 5-25 mg/day (mean 14.9 mg/day) after 3 month of treatment, and 5-20 mg (mean 13.6 mg/day), after 6 and 12 months of treatment.

Results: The intensity of psychopathology on PANSS was at baseline 99 points, and after 3, 6 and 12 months of treatment 63, 54 and 51p, respectively, with significant systematic improvement during olanzapine treatment ($p<0.001$, ANOVA Friedman Test). After 3 month of treatment, there was a significant amelioration on TMT, Stroop, and WCST-conceptual responses. A after 3, 6 and 12 months of treatment significant improvements on TMT, Stroop and WCST were observed. The level of cognitive improvement was assessed with the decrease on negative symptoms. After 3 month – this correlated with improvement on TMT and WCST-perseverative errors, and after 6 and 12 months with TMT A and WCST perseverative errors.

Conclusions: The results obtained show a significant improvement of psychopathology and neuropsychological frontal lobe tests after long-term treatment with olanzapine.