

Conclusions: The differential impact of trauma severity on ER in males and females with FEP may be theoretically interpreted as the distinct way that hypervigilance affects the sexes. Early intervention services should refine social cognitive interventions in male and female trauma survivors to facilitate social functioning improvements.

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Keywords: psychosis; social cognition; sex differences; childhood trauma

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Multivitamin, mineral and n-3 pufa supplementation to reduce aggression among chronically admitted psychiatric patients: A randomized clinical trial

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Introduction: Aggression and violent incidents are a major concern in psychiatric inpatient care, potentially leading to physical and psychological consequences for both patients and staff. Nutritional supplementation was found to reduce aggressive incidents and rule violations in forensic populations and children with behavioural problems.

Objectives: To assess whether multivitamin, mineral and n-3 PUFA supplementation is effective in reducing the number of aggressive incidents among psychiatric patients who are chronically admitted.

Methods: In a pragmatic, multicentre, randomized, double-blind, placebo-controlled study, psychiatric inpatients were randomized to receive either three supplements containing multivitamins, minerals, and n-3 PUFA or placebo. During the intervention period of six months, aggressive incidents were assessed using the Staff Observation Aggression Scale – Revised (SOAS-R). Secondary outcome parameters were the patients' quality of life and affective symptoms. The trial was registered in the Clinical Trials Register (NCT02498106).

Results: A total of 176 patients were enrolled and randomly assigned to receive supplements (n=87) or placebo (n=89). They were on average 49.3 years old (SD=14.5), and 64.2% were male. Most patients had a psychotic disorder (60.8%). Supplementation versus placebo significantly increased circulating micronutrient levels. The primary outcome of SOAS-R incidents was similar in those assigned to supplements (1.03 incidents per month; 95% confidence interval [CI]: 0.74-1.37) and placebo (0.90; 95%CI: 0.65-1.19), with a rate ratio of 1.08 (95%CI: 0.67-1.74; p=0.75). Differential effects were neither found in sensitivity analyses on the SOAS-R, nor on secondary outcomes.

Conclusions: Six months of nutritional supplementation did not reduce aggressive incidents among chronically admitted psychiatric inpatients.

Disclosure: No significant relationships.

Keywords: n-3 PUFA; Aggression; psychiatric inpatients; nutritional supplements

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Childhood trauma in schizophrenia spectrum disorders and intensity of psychotic symptoms

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Introduction: The relationship between history of childhood trauma (CT) and current schizophrenic symptoms is complex and controversial. Most of the studies report more positive psychotic symptoms (PPS) in psychotic patients who had suffered CT. Findings for negative psychotic symptoms (NPS) are mixed: most authors do not find differences or even find less.

Objectives: The purpose of this study is to evaluate and describe the types of CT suffered by patients diagnosed with schizophrenia spectrum disorders (SSD), and to analyse the relationship between history of CT and the present-time intensity of PPS and NPS.

Methods: We conducted a cross-sectional study of 45 adult patients with a SSD. Instruments: Childhood Trauma Questionnaire, short form (CTQ-SF) for measuring CT and Positive and Negative Syndrome Scale (PANSS) to assess the PPS and NPS of psychosis.

Results: 77.8% of the patients reported having suffered any kind of CT. By types of trauma: 48.9% reported emotional abuse, 28.9% physical abuse, 40.0% sexual abuse, 55.6% emotional neglect and 46.7% physical neglect. A lineal correlation between CTQ-SF and PANSS+/- scores was performed. Neither total PANSS+ nor any particular PANSS+ items correlate with CTQ scores. A significant inverse lineal association of moderate intensity exists between total PANSS- score and CT intensity ($\rho = -0.300$, $p = 0.045$).

Conclusions: In line with previous research, our study has found inverse correlation between NPS and CT. In contrast, no association was found between PPS and CT. Our sample was mostly composed by chronic patients, which might explain the differences with the previous literature.

Disclosure: No significant relationships.

Keywords: Schizophrenia spectrum disorders; childhood trauma; positive psychotic symptoms; Negative psychotic symptoms

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Factors affecting cognitive remediation outcome in schizophrenia: The role of treatment resistance

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Introduction: Treatment-resistant schizophrenia (TRS) represents a major clinical issue, characterized by worse psychopathological outcome, a more disrupted neurobiological substrate and higher health-care costs. Cognitive impairment is a core feature of schizophrenia, strongly associated with patients' functional outcome. Different studies showed that TRS patients exhibit poorer neurocognitive performance, particularly on verbal domains. To date Cognitive Remediation Therapy (CRT) represents the best available tool for treating cognitive deficits in schizophrenia. However, CRT outcomes are highly heterogeneous and significant treatment predictors are still lacking.

Objectives: To investigate possible differences of CRT outcome among patients with schizophrenia, stratified according to antipsychotic response (TRSs vs. first-line responders - FLRs).

Methods: 150 patients with schizophrenia, (95 FLRs, 55 TRSs) were assessed for neurocognition with BACS and WCST at baseline and after CRT. General Linear Models (GLMs) were performed to investigate possible differences between groups on basal cognition and CRT outcome (Cohen's d Effect Size).

Results: At baseline, GLMs showed significant differences in Verbal Memory ($F=4.66$; $p=0.03$) and WCST-executive functions ($F=5.59$; $p=0.02$), both worse in TRS group. Effect Sizes of CRT outcome resulted significantly different in domains of Verbal Memory ($F=4.68$; $p=0.03$) and WCST-executive functions ($F=4.62$; $p=0.03$), with greater improvements among TRS patients.

Conclusions: This is the first study to indicate treatment-resistance as a possible predictor of CRT outcome in schizophrenia. Moreover, we observed that CRT resulted able to fill the cognitive gap between treatment groups. Thus, these results further highlight the importance of early cognitive interventions in order to reduce the neuropsychological and functional burden associated with the disease, especially for TRS patients.

Disclosure: No significant relationships.

Keywords: treatment resistance; cognitive remediation; schizophrénia

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Influenza and schizophrenia: How can we shed a light in the new virus from an old association?

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Introduction: COVID-19 raises serious concerns regarding its unknown consequences for health, including psychiatric long term

outcomes. Historically, influenza virus has been responsible for pandemics associated with schizophrenia. Epidemiological studies showed increased risk for schizophrenia in children of mothers exposed to the 1957 influenza A2 pandemic. Controversy remains concerning the mechanisms of pathogenesis underlying this risk.

Objectives: We aim to review the evidence for the association between influenza infection and schizophrenia risk, the possible pathogenic mechanisms underlying and correlate these findings with the schizophrenia hypothesis of neurodevelopment.

Methods: We reviewed literature regarding evidence from epidemiological, translational animal models and serological studies using medline database.

Results: The biological mechanisms likely to be relevant account to the effects of infection-induced maternal immune activation, microglial activation, infection-induced neuronal autoimmunity, molecular mimicry of the influenza virus, neuronal surface auto-antibodies and psychosis with potential infectious antecedents. Influenza infection may fit into the theory of the neurodevelopment of schizophrenia as a factor that alters the normal maturation processes of the brain (possible second or third hit).

Conclusions: Influenza infection has multiple pathogenic pathways in both pre and post natal processes that might increase the risk of schizophrenia or psychosis. The existing evidence regarding the relationship between influenza virus and psychosis might help us draw similar long-term concerns of COVID-19.

Disclosure: No significant relationships.

Keywords: schizophrénia; influenza; viral; infection

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Negative symptoms in first episode schizophrenia: Results from the “parma early psychosis” program

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Introduction: Identifying distinct dimensions of negative symptoms in First Episode Schizophrenia (FES) might result in a better understanding and treatment of this invalidating symptomatology.

Objectives: Aim of this study was to examine negative symptom structure in FES patients using the Positive and Negative Syndrome Scale (PANSS).

Methods: All 147 participants, aged 12–35 years, completed the PANSS and the Global Assessment of Functioning (GAF) scale. A principal component analysis with varimax rotation was performed to investigate PANSS negative symptom structure in the FES total sample.

Results: A 2-factor model (i.e. “Expressive Deficits” and “Asociality” dimensions) was identified. Only “Expressive Deficits” domain had a significant negative correlation with baseline GAF score.

Conclusions: This bipartite solution seems to be adequate to describe the phenomenological variety of negative symptoms experienced by FES individuals at the point of entry in early intervention services.

Disclosure: No significant relationships.

Keywords: psychopathology; negative symptoms; schizophrénia; early psychosis