

## O279

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

M. Spangaro<sup>1\*</sup>, M. Bosia<sup>2</sup>, F. Martini<sup>1</sup>, M. Bechi<sup>1</sup>, M. Buonocore<sup>1</sup> and R. Cavallaro<sup>2</sup>

<sup>1</sup>Clinical Neurosciences, IRCCS San Raffaele Scientific Institute, milano, Italy and <sup>2</sup>Faculty Of Medicine, Vita-Salute San Raffaele University, Milan, Italy

\*Corresponding author.

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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; schizophrenia

## O276

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

D. Magalhães<sup>1\*</sup>, F. Ferreira<sup>1</sup>, T. Ferreira<sup>1</sup>, I. Figueiredo<sup>2</sup>, F. Martinho<sup>1</sup>, R. Felício<sup>2</sup> and N. Santos<sup>1</sup>

<sup>1</sup>Psychiatry, Hospital Professor Doutor Fernando Fonseca, Lisboa (Amadora), Portugal and <sup>2</sup>Mental Health Department, Hospital Professor Doutor Fernando Fonseca, Lisboa (Amadora), Portugal

\*Corresponding author.

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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:** schizophrenia; influenza; viral; infection

## O277

### Negative symptoms in first episode schizophrenia: Results from the "parma early psychosis" program

L. Pelizza<sup>1\*</sup>, E. Leuci<sup>1</sup>, D. Maestri<sup>1</sup>, E. Quattrone<sup>1</sup>, G. Paulillo<sup>1</sup>, P. Pellegrini<sup>1</sup> and S. Azzali<sup>2</sup>

<sup>1</sup>Department Of Mental Health, Azienda USL di Parma, Parma, Italy

and <sup>2</sup>Department Of Mental Health, Azienda USL-IRCCS di Reggio Emilia, Reggio Emilia, Italy

\*Corresponding author.

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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; schizophrenia; early psychosis