Poster Session II

S269

F126. PATHWAYS FROM SPEECH ILLUSIONS TO PSYCHOTIC SYMPTOMS IN SUBJECTS AT ULTRA-HIGH RISK FOR PSYCHOSIS: COMBINING AN EXPERIMENTAL PARADIGM OF ABERRANT EXPERIENCES WITH NETWORK ANALYSIS

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Background: One of the oldest and most influential theories of psychosis formation states that delusions arise in an attempt to explain unusual experiences, including perceptual aberrations. The White Noise Task by Galdos et al (2011) was developed as an experimental task to assess the tendency to attribute meaning to random perceptual stimuli: speech illusions in white noise. Studies to date have demonstrated that speech illusions as assessed with the White Noise Task are associated with a composite measure of positive symptoms in patients with psychotic disorders (Galdos et al, 2011; Catalan et al, 2014). However, findings in non-clinical samples have been inconsistent: one study found an association with a composite measure of subclinical positive symptoms, including support for a relation with familial psychosis liability (Galdos et al, 2011), whereas other studies did not find any association in non-clinical samples or only partly (Catalan et al, 2014; Rimvall et al, 2016; Pries et al, 2017). The current study aims to further examine whether speech illusions as assessed with the White Noise Task are indicative of psychosis liability and to explore specific symptomatic pathways.

Methods: We conducted symptom-based network analyses in Ultra-High Risk (UHR) subjects participating in the European network of national networks studying gene-environment interactions in schizophrenia project (EU-GEI, 2014; www.eu-gei.eu). Psychotic symptoms were assessed with the Brief Psychiatric Rating Scale (BPRS). Transition to clinical psychosis was assessed with the Comprehensive Assessment of At Risk Mental State (CAARMS). We used a conservative measure of speech illusions, as described in Catalan et al (2014).

Results: Results showed a worse significant NSS score among Kraepelinian patients: total score, sensory integration, motor integration, motor coordination, p< 0,0001; there was no link with treatment (equ mg/day chlorpromazine). As well Kraepelinian show worse significantly performance at the eye gaze test p<0,001. Multivariate analysis showed that Kraepelinian sub-type is more explained significantly by eyes-test, motor integration and disorganization dimension.

Discussion: Poor prognosis schizophrenia refers to specific and complex neurodevelopmental mechanisms which could be markers of a poor outcome. We must confirm these results in a larger prospective cohort from UHR and first episode assessing some specific neurodevelopmental markers using NSS and cognitive assessment. As well some specific biological markers and genes implicating in neurodevelopment and glutamatergic system could be studied in these patients. Focusing on these specific markers could contribute to define innovating combining therapeutic strategies (pharmacological, cognitive remediation and social skills) to avoid poor prognosis.

F127. GLOBAL RECOVERY IN A FIRST EPISODE PSYCHOSIS PROGRAM IN SOUTH AMERICA

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Background: Metaanalysis show that global recovery, (a state of clinical and social well functioning) is achieved by 13.5% patients (25%-75% quartiles 8.1–20%) (Jääskeläinen, 2013) diagnosed with schizophrenia. It has also been suggested that recovery is higher in low or lower middle-income countries compared to high and upper middle income countries. However, this is only based in a few studies. We here looked at the number of patients with first episode psychosis that met recovery criteria based on both clinical and social domains in a South American early intervention sample. We also examined whether recovery was associated with factors such as diagnoses, sex, education, substance use and duration of untreated psychosis.

Methods: This is a cross-sectional study in an outpatient First Episode Psychosis program in Chile. We gathered information on different aspects of the patients, including sociodemographic, clinical, functional and metabolic status. FAST (Functional Assessment Short Test) and SS-DSM5 (Symptom Severity Scale of the DSM5 for Schizophrenia) were applied to patients. Global recovery was defined as the presence for at least 6 months of: 1. Working or studying. 2. SS-DSM5 scale with no dimension with score over two. 3. FAST with score under 21 (which correlates with GAF > 61). The group who met recovery criteria (improvement in both clinical and social domains) was identified, and correlation and regression analysis were performed to explore the association between global recovery and selected variables.

Results: We included 80 patients in this study. Overall, 20% met global recovery criteria. Patients who did not accomplish recovery did so because of being unemployed (80.6%), not studying (79.7%), or scoring above threshold in SS-DSM5 cognitive (54.7%) and negative (45.4%) symptom domains. Univariate correlation analyses showed a significant association of global recovery with recreational drug use, diagnoses, and duration of untreated psychosis (all corrected for multiple comparisons). After multiple regression analysis including these variables, age and gender, the only one associated with recovery was shorter duration of untreated psychosis (p=0.02) OR 0.616 (IC95% 0.409-0.925).

Discussion: The number of patients achieving global recovery is consistent with the one reported for schizophrenia in previous meta-analysis and with studies on recovery after first episode psychosis (16.6% (25%-75%) quartiles
9–20.4)) (Jääskeläinen, 2013). Negative and cognitive symptoms frequently impair patient recovery. On the other hand the duration of untreated psychosis shows itself as one of the most important characteristics related with functional prognoses.

F128. THE AGE OF ONSET OF SCHIZOPHRENIA SPECTRUM DISORDERS

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Background: This study characterizes the age of onset of schizophrenia spectrum disorders and summarizes findings regarding a range of clinical and social outcomes, cognition, brain structure, and mortality.

Methods: The review is based on series of systematic and nonsystematic literature searches. We included original articles and systematic reviews looking associations between age of onset and incidence, risk factors, suicides, brain structure and cognition.

Results: The peak age of onset for schizophrenia spectrum disorders is between 20 to 29 years, in where the incidence estimate was among males 4.15 and among females 1.71 per 10,000 person-years. Male gender has been linked with earlier onset age, although among those with family history and cannabis use corresponding gender difference do not exist. Early onset schizophrenia has been linked e.g. with higher familial risk, poor premorbid social adjustment and cannabis use. In adult samples, earlier age of onset associated with worse outcome, regarding hospitalisations, negative symptoms, relapses, social and occupational functioning, and global outcome. Also in childhood and adolescence schizophrenia, earlier onset has been linked with more severe outcomes. Early age of onset has been linked also with larger cognitive deficits and brain alterations. In the few existing studies, later AOO has been linked with a higher suicide rate. In all, the current study found various differences between patients with different age of onset. However, the studies on age of onset are relative heterogeneous on methodology and have given varying results. More good quality studies are needed including patients without restriction due to the onset age.

Discussion: Age of onset is an important characteristic of schizophrenia that could help when examining the origin, genetic mechanism and care of schizophrenia. Understanding factors that influence age of onset in schizophrenia may offer clues to prevent or delay the onset of this debilitating group of disorders.

F129. COMBINED PATTERNS OF TOBACCO AND CANNABIS USE IN ADOLESCENCE AND THEIR ASSOCIATION WITH PSYCHOTIC EXPERIENCES: A LONGITUDINAL ANALYSIS

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Background: There has been increasing concern about potentially causal effects of tobacco use on psychosis, but epidemiological studies have been less robust in attempts to minimise effects of confounding than studies of cannabis use have been. We therefore aim to examine the association of patterns of cigarette and cannabis use with preceding and subsequent psychotic experiences, and compare patterns of confounding across these patterns.

Methods: We analysed repeated measures of cigarette and cannabis use during adolescence in a sample of 5,300 individuals in the Avon Longitudinal Study of Parents and Children birth cohort who had at least 3 measures of cigarette and cannabis use between ages 14–19 years. Cigarette and cannabis use data were summarised using longitudinal latent class analysis to identify longitudinal classes of substance use, and associations between classes and psychotic experiences at 18 years were assessed.

Results: Prior to adjusting for a range of potential confounders, there was strong evidence that early-onset cigarette-only use (4.3%), early-onset cannabis use (3.2%), and late-onset cannabis use (11.9%), but not later-onset cigarette-only use (14.8%) latent classes were associated with increased psychotic experiences compared to non-users (65.9%) ( omnibus P<0.001).

After adjusting for confounders, the association for early-onset cigarette-only use attenuated substantially (unadjusted odds ratio (OR) = 3.03, 95%CI 1.13, 8.14; adjusted OR = 1.78, 95%CI 0.54, 5.88), whereas those for early-onset (adjusted OR = 3.70, 95%CI 1.66, 8.25) and late-onset (adjusted OR = 2.97, 95%CI 1.63, 5.40) cannabis use were unchanged.

Discussion: Our findings indicate that whilst individuals who use either cannabis or cigarettes during adolescence have an increased risk of developing subsequent psychotic experiences, the epidemiological evidence for this being causal is substantively more robust for cannabis than it is for tobacco products.

F130. INCREASED RISK OF PSYCHOTIC DISORDERS IN AFRICAN MIGRANTS TO AUSTRALIA

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Background: Certain migrants groups are at an increased risk of psychosis compared to the native-born population, however these findings relate to certain countries, mainly in Europe and America where the research has been conducted. It is not yet known whether migrants to Australia are at an increased risk for developing a psychotic disorder. This study aimed to determine whether first-generation migrants in a geographically defined catchment area in Melbourne have an increased risk of developing a psychotic disorder.

Methods: This study included an all young people aged between 15 and 24 residing in a geographically defined catchment area of north western Melbourne who presented to the Early Psychosis Prevention and Intervention Centre (EPPIC) between 01.01.11 and 31.12.13. Data pertaining to the at risk population was obtained from the Australian 2011 Census and incidence rates ratios were calculated.

Results: A total of 527 individuals with FEP were included, 393 were Australian-born (74.6%) and 134 (25.4%) were overseas-born. First generation migrants from Kenya (IRR=9.81), Ethiopia (IRR=5.17), Somalia (IRR=3.78), and Sudan (IRR=3.57), had significantly increased risk of having a psychotic disorder. Conversely, first generation migrants from India and China had significantly decreased risk of having psychosis.

Discussion: First-generation migrants from East Africa and the Horn of Africa have significantly high rates of psychosis and they may have experienced factors pre-, during, and post-migration, predisposing them to psychosis.

F131. CHILDHOOD ADVERSITIES IN PEOPLE AT ULTRA-HIGH RISK (UHR) FOR PSYCHOSIS: SYSTEMATIC REVIEW & META-ANALYSIS

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Background: Childhood adversities such as childhood abuse, bullying victimisation, and parental separation have been found to be associated with many psychiatric illnesses, including psychosis. A large body of research has been conducted on individuals at ultra-high risk (UHR) for psychosis, or clinical high risk (CHR)