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ABSTRACTS OPEN

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Monday, 4 April 2016
11:00 a.m.–1:00 p.m.
Poster Session/Lunch II

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M1. Childhood adversities in first episode psychosis

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Background: Childhood trauma experiences and negative life events are risk factors for psychosis. A meta-analysis found psychosis patients to have exposed to such adversities 2.7 times more likely compared to control subjects. The objective of this study was to explore negative life experiences among first episode psychosis (FEP) patients compared to control participants.
Methods: The participants were adult FEP patients ($n=67$) with first psychiatric contact for psychosis in Helsinki, Finland. They were interviewed as soon as possible after entering treatment. A matched control sample collected from the civil register ($n=41$) was also included. Symptomatology was assessed with Brief Psychiatric Rating Scale (BPRS) and other validated instruments. 11 negative childhood experiences were surveyed in a questionnaire, including financial troubles of the childhood family, frequent unemployment of parents, and parental divorce. Serious illnesses of parents and the respondent, and parents' problems with mental health or with alcohol were also inquired, as well as severe conflicts at home and school bullying.
Results: 81% of the patients and 54% of the controls reported at least one childhood adversity. The number of adverse experiences was higher among psychosis patients (mean 2.3) than among controls (mean 1.1), $P=.002$. There were no gender differences. Specifically, conflicts within the family, bullying at school, and own and parents' serious illness were reported by patients more often than controls. In the FEP group, BPRS last week 1-24 sum score, anxiety (assessed with Beck Anxiety Inventory), and obsessive-compulsive symptoms (assessed with Obsessive-Compulsive Inventory – Revised) were positively correlated with the number of adverse life events. Patients with positive mania screen result (Mood Disorder Questionnaire) reported more childhood adversities compared to screen negatives. Level of functioning, depression (assessed with Beck Depression Inventory) or BPRS suicidal symptoms were not associated with exposure to childhood adversities.
Discussion: A majority of the patients with FEP reported exposure to childhood adversities, the patients reporting more adversities than controls. These results are in line with earlier studies on the association between psychosis and childhood trauma. Compared to controls, the patients in this sample were especially exposed to serious illness, parents' serious illness, bullying, and conflicts within the family. Associations of childhood adversities with BPRS, anxiety, mania, and obsessive-compulsive symptoms were also found. Detailed results will be presented and discussed in the meeting. Understanding the association between negative life events and psychosis is important in treating FEP patients, with a possible impact on the prognosis of the illness.

M2. Clozapine as a treatment for tardive dyskinesia: a meta analysis

Thierry Mentzel*[1], Rene Snoek, van der[2], Margreet Oorschot[2], Wolfgang Viechtbauer[3], Oswald Bloemen[1], Ritsaert Lieverse[3], Peter Van Harten[1]

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Background: Tardive dyskinesia (TD) is a drug-induced movement disorder that typically occurs after long term exposure to antipsychotic drugs. Meta-analyses have investigated several TD treatment strategies and none of these strategies led to a significant overall decrease in severity. Switching to clozapine is often suggested as a treatment for TD. However, no meta-analysis to validate this intervention has been published yet.
Methods: An electronic search was carried in the PUBMED, PsycINFO, and Embase databases. As clozapine has been studied extensively and TD is frequently assessed as a secondary outcome we performed the search using a broad set of terms related to TD and clozapine. This study is being conducted in accordance to the MOOSE guidelines.
Results: Of the 8009 articles that were found 205 potentially relevant articles were selected based on their title and abstract. 58 of these articles may contain relevant information and are now being analyzed. A secondary search is also being performed on the articles published after 2013.
Discussion: The final overall results and discussion of these articles, and will be presented at the conference.

M3. Impact of adverse childhood experiences on psychotic-like symptoms and stress reactivity in daily life in nonclinical young adults

Tamara Sheinbaum*[1], Paula Cristóbal-Narváez[1], Sergi Ballespí[1], Mercè Mitjavila[1], Inez Myin-Germeys[2], Thomas R Kwapil[3], Neus Barrantes-Vidal[1]

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Background: There is increasing interest in elucidating the association of different childhood adversities with psychosis-spectrum symptoms as well as the mechanistic processes involved. The present study used Experience Sampling Methodology to examine (i) associations of a range of childhood adversities with psychosis symptom domains in daily life; (ii) whether associations of abuse and neglect with symptoms are consistent across self-report and interview methods of assessment; and (iii) the role of different adversity subtypes in moderating affective, psychotic-like, and paranoid reactivity to situational and social stressors.
Methods: A total of 206 nonclinical young adults were administered self-report and interview measures to assess childhood abuse, neglect, bullying, losses, and general traumatic events. Participants received personal digital assistants that signaled them randomly eight times daily for one week to complete questionnaires about current experiences, including symptoms, affect, and stress.
Results: Self-reported and interview-based abuse, and neglect were associated with psychotic-like and paranoid symptoms, whereas only self-reported neglect was associated with negative-like symptoms. Bullying was associated with psychotic-like symptoms. Losses and general traumatic events were not directly associated with any of the

associated with remission status at follow-up. Substance use in the year after psychosis onset was associated with increased probability of poor medication adherence during the follow-up. In particular, the analysis showed significant main effects of nicotine dependence (OR = 2.18), cannabis use (OR = 2.86), and stimulant use (OR = 2.63) on the odds of being non adherent to treatment. In contrast, the OR failed to reach significance for an association between problem drinking and poor medication adherence.
Substance use in the first year after psychosis onset was associated with increased probability of non-remission during the one year follow-up. In particular, the analysis showed significant main effects of nicotine dependence (OR = 2.13) and cannabis use (OR = 2.60) on probability of not achieving remission. In contrast, the ORs failed to reach significance for an association between problem drinking and non-remission as well as between stimulant use and non-remission. Medication adherence significantly predicted remission during the one year follow-up. In particular, patients with poor medication adherence showed a six-fold increased probability of non-remission of their psychosis when compared with patients with good medication adherence. When substance use in the one year follow-up period was added in to this model, the association between medication adherence and remission was still significant. Following Baron and Kenny's approach to mediation, criteria were satisfied only for nicotine dependence and cannabis use post onset. In order to test for mediation, the associations between nicotine dependence after psychosis onset and non-remission as well as between cannabis use and non-remission were adjusted for medication adherence. When medication adherence was added in to the model, even if increased, the ORs failed to reach significance. Sobel tests for mediation showed that medication adherence was a significant mediator of the relationship between nicotine dependence and remission ($z = 2.02$, $P = 0.04$) as well as that between cannabis use and remission ($z = 2.12$, $P = 0.03$).
Discussion: In conclusion, medication adherence lies on the causal pathway between nicotine dependence and cannabis on the one hand and non-remission on the other. As cannabis and tobacco are often consumed together in the same joint and there is accumulating evidence of a common underlying vulnerability to both substances, further research is needed to definitively disentangle their independent contribution on patients' clinical outcome.

M110. 36 Month results of a smoking and healthy lifestyles intervention among people with a psychotic disorder

Amanda Baker*[1], Robyn Richmond[2], Frances Kay-Lambkin[1], Sacha Filia[3], David Castle[4], Robin Callister[1], Jill Williams[5], Vanessa Clark[1], Terry Lewin[6], Kerrin Palazzi[1]

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Background: People with schizophrenia have a life expectancy 15 years less than the general community, and much higher rates of chronic diseases such as cardiovascular disease, diabetes and obesity. In response to this disproportionately high burden of illness the first Australian National Report Card on Mental Health stated "the reduced life expectancies and poor health of people with the most severe mental illnesses…is a national disgrace and it should be a major public health concern". Telephone interventions for health behaviors (such as smoking, alcohol use, low fruit and vegetable consumption and high levels of sedentary activity) as well as for psychotic symptomatology and also smartphone applications have been evaluated with promising results. This is the first randomized controlled trial to evaluate a cognitive-behavioral intervention addressing smoking and other health behaviors among people with psychotic disorders.
Methods: Study participants were randomly assigned to receive a single face to face session consisting of feedback and motivational interviewing and nicotine replacement therapy, plus either: (i) a face-to-face intervention targeting multiple health risk behaviors; or (ii) a predominantly telephone delivered intervention involving monitoring. Follow-up surveys were completed at 15 weeks ($n = 165$, 70.2%), 12 months ($n = 139$, 59%), 18 months ($n = 132$, 56.2%), 24 months ($n = 133$, 56.6%), 30 months ($n = 129$, 54.9%) and 36 months ($n = 134$, 57%). ITT analysis was used for primary outcomes and mixed models were used for both primary and secondary modeling, so all study participants were included in analyses.
Results: At baseline, participants ($N = 235$, Age, M = 41.6 years, 59% male) were smoking on average 28.6 (SD = 15.3) CPD. There were no significant overall differences between the telephone and face-to-face conditions in the primary smoking outcome of biochemically confirmed point-prevalence abstinence rates (8% and 11% respectively) at 36 months. There were no significant differences between groups in most measures of exercise, diet and body measures (total minutes walking per week, total minutes sitting per week, BMI, waist circumference, weight, waist-to-hip ratio).
Discussion: Face-to-face and telephone-delivered interventions are feasible and effective among people with severe mental disorders for smoking. Interventions for multiple health behavior change appear worthy of further research among people with psychotic disorders.

M111. Impact of cannabis use on clinical outcomes and treatment failure in first episode psychosis

Rashmi Patel*[1], Robin Wilson[1], Richard Jackson[1], Michael Ball[1], Hitesh Shetty[2], Matthew Broadbent[2], Robert Stewart[1], Philip McGuire[1], Sagnik Bhattacharyya[1]

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Background: Cannabis is frequently used by people with first episode psychosis (FEP), though its effect on clinical outcome is less clear. We investigated whether cannabis use may be associated with increased risk of hospitalization and whether antipsychotic treatment failure, as indexed by number of unique antipsychotics prescribed, may mediate this effect in a large dataset of patients with FEP.
Methods: Data were obtained from electronic health records of 2,026 people with FEP in the South London and Maudsley NHS Foundation Trust (SLaM) using the Clinical Record Interactive Search tool (CRIS). Cannabis use was identified using natural language processing. Data on subsequent hospital admission and the number of unique antipsychotics prescribed (a marker of treatment failure) were obtained and analyzed using multivariable regression and mediation analyses with age, gender, ethnicity, marital status and diagnosis as covariates.
Results: Cannabis use was present in 46.3% of the sample at first presentation and was particularly common in patients who were 16-25, male and single. It was associated with increased frequency of hospital admission (incidence rate ratio 1.50, 95% CI 1.25 to 1.80), increased likelihood of compulsory admission (odds ratio 1.55, 1.16 to 2.08) and greater number of inpatient days (B coefficient 35.1 days, 12.1 to 58.1). Antipsychotic treatment failure mediated increased frequency of hospital admission (natural indirect effect: 1.09, 95% CI 1.01 to 1.18; total effect: 1.50, 1.21 to 1.87), increased likelihood of compulsory admission (NIE: 1.27, 1.03 to 1.58; TE: 1.76, 0.81 to 3.84) and greater number of inpatient days (NIE: 17.9, 2.4 to 33.4; TE: 34.8, 11.6 to 58.1).
Discussion: Cannabis use in patients with FEP was associated with increased likelihood and duration of hospital admission. This was linked to the prescription of several different antipsychotic drugs, indicating clinical judgement of antipsychotic treatment failure. This suggests that cannabis use might be associated with worse clinical outcomes in psychosis by contributing towards failure of antipsychotic treatment.

M112. Better social but worse academic premorbid adjustment in cannabis-users psychotic patients across Europe

Laura Ferraro[1], Capuccio Veronica[1], Caterina La Cascia[1], Lucia Sideli[1], Alice Mulè[1], Fabio Seminerio*[1], Crocettarachele Sartorio[1], Giada Tripoli[1], Robin Murray[2], Daniele La Barbera[1], Marta Di Forti[2]

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Background: Several studies report that patients with psychosis who used cannabis have a better cognitive performance than those who

did not (Rabin *et al.* 2011). In a previous study we found out a higher premorbid IQ, and a better IQ in psychotic patients who smoked cannabis in their lifetime, and our findings were consistent with the idea that this association is due to a better premorbid functioning rather than to an ameliorative effect of cannabis use on cognitive performance (Ferraro *et al.*, 2013). A number of authors have hypothesized that psychotic patients who consume cannabis constitute a differentiated subgroup of patients that have better cognitive and social skills, necessary to engage in illegal drug consumption, than non-using patients (Compton *et al.*, 2011; Løberg *et al.*, 2014; Arnold *et al.*, 2015). Given that the prevalence, and patterns, of cannabis use are culturally driven, we wanted to test the hypothesis of a better premorbid functioning in First Episode Psychosis (FEP) cannabis-using and non-using patients coming from different European countries (England, Italy, Spain, France, the Netherlands) as part of the EUGEI-STUDY.
Methods: 1.745 people (746 cases; 999 controls) completed the assessment for Intellectual Quotient (IQ) (WAIS-brief version) premorbid adjustment (Premorbid Adjustment Scale – PAS) and cannabis use (CEQ-Revised). We first performed a factor analysis on PAS components, by obtaining two main factors: "Premorbid Social Adjustment" (PSA) and "Premorbid Academic Adjustment" (PAA). We therefore performed linear mixed models with IQ, PSA, and PAA as dependent variables and cannabis lifetime (Yes/No), subject status (Cases/Controls), gender and age as independent variables.
Results: Across all countries, IQ was higher in those patients who smoked cannabis in their lifetime compared to those who did not ($P = 0.027$). This IQ difference was only 3 points and was the same for cases and healthy controls ($P = 0.949$). Similarly, patients who had smoked cannabis in their lifetime showed better PSA scores than non users ($P = 0.009$). The difference in PSA score between cannabis-users and non-users was significantly greater in cases than controls ($P = 0.038$). Conversely, across all countries, PAA resulted worst in patients who smoked cannabis lifetime than patients who did not ($P < 0.001$) and this PAA score difference was the same for cases and controls ($P = 0.693$).
Discussion: Our cannabis-using FEP patients have higher IQ, better PSA and lower PAA than non user patients across 5 different European countries. Starting from these preliminary results, we can conclude that a better PSA is significantly associated with cannabis use in FEP patients. Nevertheless, in an exploratory analysis, a better IQ resulted related to a better PAA (< 0.001) but not to PSA ($P = 0.260$); thus indicating an independent relationship of IQ and PSA with cannabis use. Further analysis are required in order to model these multivariate relationships.

M113. Comparison of CHR risk symptoms in the pronia population - first results from the PRONIA study

Theresa Haidl*[1], Kaiser Nathalie[1], Marlene Rosen[1], Frauke Schultze-Lutter[2], Stefan Borgwardt[3], Paolo Brambilla[4], Christos Pantelis[5], Raimo K. R. Salokangas[6], Stephen Wood[7], Nikolaos Koutsouleris[8], Stephan Ruhrmann[1], and the PRONIA Group[9]

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Background: In Europe schizophrenia is among the leading causes of years lost to disability (YLDs) in adults (Wittchen *et al.*, 2011). Consequently, a special interest in the prevention of schizophrenia and psychotic disorders exists (Solis *et al.*, 2014). For the aim of early detection different clinical high risk criteria (CHR) have been developed. The currently most widespread criteria are the ultra-high risk (UHR), and the basic symptom approach. UHR criteria were developed to detect an imminent risk for a transition to psychosis. They comprise the attenuated psychotic symptom criterion (APS), the brief limited psychotic symptom criterion (BLIPS) and the genetic risk and functional decline criterion. Under the umbrella of the UHR concept, different assessment concepts have been developed, resulting into two dominating scales, the Comprehensive Assessment of the At Risk Mental State (CAARMS) (Yung *et al.*, 2005) and the Structured Interview of Prodromal Syndroms (SIPS) (McGlashan *et al.*, 2010). One major difference between theses scales is the obligatory requirement of a considerable functional deterioration as part of all three UHR criteria in the CAARMS. Basic symptoms are conceptualized as earliest, therefore mostly subjective disturbances of several domains. With regard to the prediction of psychosis the cluster 'Cognitive Disturbances' (COGDIS) is currently the most used Basic symptom criterion (Schultze-Lutter *et al.*, 2007). The co-occurrence of both UHR and COGDIS criteria, was associated with a higher risk for a transition to psychosis than one of the criteria alone (Ruhrman *et al.*, 2010; Schultze-Lutter *et al.* 2014). In PRONIA, a modified version of the SIPS UHR criteria as well as COGDIS are used as alternative inclusion criteria.
Methods: PRONIA ('Personalized Prognostic Tools for Early Psychosis Mangement') is a prospective collaboration project funded by the European Union under the 7th Framework Programme (grant agreement n° 602152). Considering a broad set of variables (sMRI, rsMRI, DTI, psychopathological, life event related and sociobiographic data, neurocognition, genomics and other blood derived parameters) as well as advanced statistical methods, PRONIA aims at developing an innovative multivariate prognostic tool enabling an individualized prediction of illness trajectories and outcome. Seven university centers in five European countries and in Australia (Munich, Basel, Birmingham, Cologne, Melbourne, Milan/Udine, Turku) participate in the evaluation of three clinical groups (subjects clinically at high risk of developing a psychosis [CHR], patients with a recent onset psychosis [ROP] and patients with a recent onset depression [ROD]) as well as healthy controls; planned sample size is $n = 1700$. To elucidate the effects of different CHR criteria, PRONIA performs additional assessments of the original SIPS 5.0 and the CAARMS criteria in all CHR participants included by the PRONIA criteria.
Results: The first 76 CHR subjects included into PRONIA were considered for a first analysis of the distribution of inclusion criteria. 82.9% were included by the PRONIA UHR criteria, 17.1% by the COGDIS criteria. SIPS 5.0 criteria were met by 81.4%. However, only 42.1% of the included individuals fulfilled any of the CAARMS definition of UHR criteria.
Discussion: Our preliminary analysis demonstrated a high correspondence between the PRONIA and the SIPS 5.0 definitions of UHR criteria. The proportion of individuals meeting the CAARMS criteria was considerably lower, which may indicate a lower sensitivity for at-risk states. The prospective follow-up design of PRONIA will reveal the impact of these differences on the 18-month risk of transition to psychosis.

M114. Addressing the risks of being 'at risk': the effects of labeling versus symptom severity on public attitudes toward individuals at risk for psychosis

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Background: While there is a wide consensus regarding the potential benefits that early detection and intervention in clinical high-risk states for psychosis might offer, inclusion of an official psychosis risk diagnosis in the DSM raises serious concerns regarding the iatrogenic stigmatizing effect that a diagnostic label of this kind might have on patients, families and institutions. Based on examples from other areas in medicine (e.g., 'hearing loss' as opposed to 'attenuated deafness'), and recent proposals within psychiatry to replace 'schizophrenia' with a diagnostic label that relates to aspects of human mentation that are universal (Sato, 2006; van Os, 2009), we have recently hypothesized (Koren, 2013) that reframing the psychosis risk syndrome as 'endangered reality-testing syndrome' has the potential to address these concerns. The goal of this presentation is to introduce this notion and present pilot data that provide preliminary support for its validity.
Methods: A random sample of 125 adults from the general population read an experimental vignette describing a young adolescent experiencing either mild or severe prodromal symptoms who was randomly assigned a 'psychosis-risk' or 'high-risk reality testing' diagnostic label, and answered questions about stigma, hope, and need for care toward the individual in the vignette.
Results: Compared with the 'psychosis risk' label, 'high-risk reality testing' elicited significantly higher appraisals of self-image, hope,