O8.3. CLINICAL AND FUNCTIONAL OUTCOMES IN YOUNG ADULTHOOD OF CHILDREN WITH PSYCHOTIC SYMPTOMS: A LONGITUDINAL TWIN COHORT STUDY

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Background: Childhood psychotic symptoms, such as hallucinations and delusions, are relatively common and have been shown to increase risk of psychotic disorders in adulthood. However, less is known about their association with other forms of psychopathology and more broadly with social and occupational functioning during the crucial transition to adulthood. Using a prospective genetically-sensitive birth cohort we investigated associations between age-12 psychotic symptoms and a range of mental health problems and functional outcomes at age 18.
Methods: Data from utilized from the Environmental Risk (E-Risk) Longitudinal Twin Study, a birth cohort of 2,232 twins born in 1994–1995 in England and Wales, followed to age 18 with 93% retention. Childhood psychotic symptoms were assessed in private interviews at age 12. At age 18, interviews were conducted to assess psychopathology, social and occupational functioning, physical health, quality of life, risky and offending behaviors.
Results: Children with psychotic symptoms were at greater risk of psychotic phenomena, depression, anxiety, and suicide attempts or self-harm in young adulthood than children without such symptoms. They were also more likely to be obese, smoke cigarettes, be lonely, already have children, and report a lower quality of life at age 18 compared with their unaffected peers. These associations held when controlling for sex, age-5 IQ, other psychopathology at age 12, and family environment.
Discussion: In our genetically sensitive cohort, we showed strong evidence of continuity between early psychotic symptoms in childhood and persistence of psychotic phenomena to young adulthood. Psychotic symptoms in childhood are also important risk markers for a wide range of non-psychotic disorders and poor functional outcomes and therefore should be carefully assessed and treated to prevent adverse consequences in adulthood.

O8.4. THE EFFECT OF EARLY MEDICATION DISCONTINUATION ON LONG-TERM CLINICAL OUTCOME IN FIRST EPISODE PSYCHOSIS

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Background: Clinical decision to dis/continue antipsychotics in patients remitted from first-episode psychosis is important. Existing short-term evidence suggests that patients who discontinued antipsychotics had more relapses. Data on long-term outcomes are lacking; with only one open-label study suggesting better long-term recovery outcome in patients who had early medication discontinuation. We examined the long-term effect of early medication discontinuation in year 2 following first-episode remission for patients with no residual psychotic symptoms.
Methods: We followed-up 178 first-episode psychosis patients who participated in a 1-year randomized controlled trial (RCT) on medication discontinuation. Patients were randomized into receiving either a medication maintenance group or a placebo discontinuation group. After the RCT, all patients received usual psychiatric care. Poor long-term clinical outcome was defined as a composite of persistent psychotic symptoms, a requirement for clozapine, or suicide.
Results: There were no differences between patients who were included (n=142) and excluded (n=36) from the study with regard to their baseline demographics, clinical and functioning. At 10 years, more patients in the early discontinuation group (35/89, 39%) had poor clinical outcome than patients in the maintenance group (19/89, 21%) (P<0.01). Relapse during the RCT has partly mediated the significant relationship between early medication discontinuation and poor outcome at 10-year.
Discussion: Whether to discontinue medication following successful treatment of first episode psychosis is a difficult clinical decision. In first episode psychosis with a full initial response to antipsychotic treatment, continued need for medication is important for the first three years after starting treatment, to prevent relapse, and decrease the risk for a poor long-term outcome.

O8.5. SCHIZOPHRENIA AND BIPOLAR DISORDER DIAGNOSIS PATTERNS: REAL-WORLD EVIDENCE FROM US CLAIMS DATABASES

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Background: Schizophrenia and bipolar disorder (BD) are typically understood as separate and non-concurrent psychiatric disorders both in the clinical setting and in the DSM-V and ICD-10 classification systems. However, patients may experience both mood and schizophrenia symptoms simultaneously. Several studies have shown overlap between schizophrenia and BD symptoms, which may lead to diagnostic confusion. Additionally, molecular studies have confirmed that schizophrenia and BD share susceptibility genes. This study explored diagnosis patterns of patients with schizophrenia and/or type I bipolar disorder (BD-I) diagnoses in a real-world setting.
Methods: This was a retrospective cohort study using Truven MarketScan® Commercial, Medicaid, and Medicare Supplemental databases from the study period 01/01/2012 and 06/30/2016. Patients were considered to have a diagnosis of schizophrenia if 1 inpatient claim or 2 outpatient claims for schizophrenia were identified within a selected identification period (01/01/2013 and 06/30/2015). BD-I was defined in an analogous way, and the following five mutually exclusive cohorts were defined: 1) schizophrenia (SCZ) alone (cohort I): newly diagnosed with schizophrenia alone (e.g., met the claims-based diagnostic criteria for schizophrenia, but not for BD-I), 2) BD-SCZ (cohort II): met BD-I criteria only in the year prior to meeting the schizophrenia criteria, 3) SCZ-BD (cohort III): met schizophrenia criteria only in the year prior to, or on the same day as, meeting BD-I criteria, 4) BD-SCZ-BD (cohort IV) met BD-I criteria both in the year before and the year after meeting the schizophrenia criteria, and 5) BD alone (cohort V): newly diagnosed with BD-I alone (e.g., met the claims-based diagnostic criteria for BD-I, but not for schizophrenia). Descriptive statistics are reported for all cohorts.
Results: Of the 63,725 patients in the final analytic sample, 11.5% (n=7,336) had schizophrenia alone (cohort I), 7.7% (n=4,909) had a dual diagnosis (cohorts II-IV), and 80.8% (n=51,480) had BD-I alone (cohort V). The dual diagnosis patients included 1.0% (n=615) with BD-SCZ (cohort II), 2.8% (n=1,794) with SCZ-BD (cohort III), and 3.9% (n=2,500) with BD-SCZ-BD (cohort IV). Patients with different diagnosis patterns significantly differed in age, gender, and insurance type (p<.001). Considering the dual diagnosis cohorts, 927 received both diagnoses on the same day. Of those occurring on the same day, the majority (n=753) were on claims from the hospital/emergency department setting.

Discussion: This analysis of real-world data found a sizable number of patients with dual diagnoses of schizophrenia and BD-I. Among all patients with either BD-I, schizophrenia, or both, about 2/3 as many met the criteria for both disorders as for schizophrenia alone. Fifteen percent of patients who met criteria for both did so on the same day, likely reflecting patients presenting to acute care exhibiting mixed features. A review of medical records would be useful to determine if dual diagnosis is more common than suspected, and claims data should be examined to determine if these patients differ sufficiently from those with a single diagnosis to warrant exclusion from single-disease cohorts.

O8.6. THE RELATIONSHIP BETWEEN COGNITION AND FUNCTIONAL IMPROVEMENT IN THE CONTEXT OF A PSYCHOSOCIAL INTERVENTION TARGETING SOCIAL DISABILITY IN FIRST EPISODE PSYCHOSIS

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Background: Whilst Early Intervention Services (EIS) are the 'gold standard' treatment for young people with psychosis, in a recent study of over 1000 First Episode Psychosis (FEP) cases, 66% of individuals were experiencing a high level of poor functioning, despite receiving care under EIS for a period of 12 months (Hodgekins et al., 2015). This highlights the need to develop new interventions to target functional impairments in FEP.
A specialised Social Recovery Cognitive Behavioural Therapy (SRCBT) has been developed which aims to address the underlying factors impeding social recovery, and has shown to be effective at improving structured activity in individuals with established illness and FEP (Fowler et al., 2013). Identifying the factors that contribute to functional change will ensure that targeted psychosocial therapies are being delivered appropriately. Impaired social cognition (SC) and neurocognition (NC) are closely related to poor functioning in psychosis. Exploration of SC and NC pre- and post-intervention will therefore be important to test underlying mechanisms of functional change, and identify individuals who are more likely to benefit from the specialized SRCBT.
Methods: This study ran alongside a multi-site proof of concept trial of SRCBT, for individuals with FEP experiencing social disability. Participants (M age = 25 years) had less than 30 hours a week of structured activity before entering the trial. At baseline, 123 participants completed a battery of SC and NC assessments. 59 participants were randomly allocated to the therapy group (SRCBT + EIS), and 64 were randomly allocated to the standard care group (care from an EIS alone). Participants completed a follow-up assessment at 9 months on the same cognitive battery, and a further assessment of their structured activity. The assessors were blind to group allocation. A small sub-sample of participants (N=6) allocated to the SRCBT group underwent functional magnetic resonance imaging (fMRI) scanning pre- and post- SRCBT, to explore any changes in the social brain regions following successful intervention.
Results: Regression analyses showed that SC was a significant predictor of treatment response (i.e. improved structured activity). Specifically, those who had better social knowledge at baseline were most likely to benefit from the SRCBT (Wald $\chi^2 = 4.073$; $p = .044$), accounting for 16% of the overall variance. To further illustrate this, individuals scoring in the top quartile for social knowledge achieved an additional 11 hours on average of structured activity post-intervention.
Furthermore, in the group that underwent fMRI scanning pre- and post - intervention, there were increased activations in the social brain regions, namely the temporo-parietal junction (TPJ), which became more refined and localized by follow-up. There was also a trend for increased signal intensity in the TPJ, with increased structured activity post-SRCBT. Although this was not significant ($r = .455$; $p = .365$), there was a moderate strength relationship
Discussion: No studies to-date have examined predictors of treatment response to a CBT intervention targeting functional impairment in FEP. These findings have implications for practice where remediation of SC may improve the efficacy of the SRCBT, particularly for individuals who have poorer social knowledge. This study is also the first to provide preliminary insights into a functional brain network associated with improved structured activity in psychosis; however, replication of these findings in a larger sample is needed.

O8.7. COGNITIVE SUBTYPES IN FIRST-EPISODE PSYCHOSIS AND ASSOCIATION TO TREATMENT RESPONSE

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Background: Psychotic disorders are characterized by large heterogeneity in clinical presentation, response to treatment and cognitive functioning. Indeed, there is evidence of the presence of cognitive subgroups of patients across affective and non-affective psychosis. However, very little is known about these subgroups in first episode psychosis (FEP) and whether they can be informative about course of illness, particularly response to treatment. The aim of this study is to investigate the number and the pattern of cognitive clusters in FEP, their external validity and association with treatment response at 12-week and 1-year follow up.
Methods: The sample was composed by a total of 212 participants including 105 FEP patients from the South London and Maudsley Foundation Trust and 107 Healthy Controls (HC). All participants underwent a comprehensive clinical and neurocognitive battery. Z-score [mean=0, and standard deviation (SD)=1] were created for the whole sample based on the neurocognitive performance of the HCs. Treatment response at 12-week and 1-year follow-up was used to explore potential utility of subtypes in predicting response to treatment. Hierarchical cluster analysis was carried out to determine the number of cognitive clusters in FEP patients. A series of analyses of variance were carried out to determine if FEP clusters differed among each other in relation to demographic and clinical characteristics, level of functioning and from the HC sample in term of cognitive performance. Logistic regression was used to explore whether cognitive clustering was predictive of treatment response at 12-week and 1-year FU.
Results: Four cognitive clusters emerged: one with near normal cognition (42.9% of the FEP patients) with a general cognitive score of z=-0.20, one with selected cognitive deficits (14.3%) in the domains of verbal memory, processing speed and executive functions (general cognitive score of z=-0.55); and two severe deficit clusters consisting in one cluster with severe deficits (33.3%; general score of z=-1.48) and the other with a deeply compromised cognitive ability (9.55%; general cognitive score of z=-2.34). There were no significant differences between clusters in terms of clinical features at baseline (including diagnosis, positive and negative symptoms, medication), apart from the level of functioning that was significantly lower in the severely compromised cluster compared to the near normal cognition cluster.
It emerged that majority (about 68%) of the patients from the near normal cognition cluster were responsive to treatment, whilst the majority of the selective and severely impaired clusters did not respond to treatment at 12-week follow-up. There were no significant results with regard to treatment response at 1-year FU.
Discussion: Distinct patterns of cognitive impairments exist within FEP that might be characterized by different response to treatment. Clinical presentation at the onset of the illness is not useful in predicting response to