Syndromes (SIPSs), present and lifetime diagnoses of schizophrenia-spectrum and depression disorders were assessed with the Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS), level of distress with the Mood and Anxiety States Questionnaire (MASQ), and psychosocial functioning with the the Strength and Difficulties Questionnaire (SDQ).

Results: Seventy-seven (77%) adolescents out of the 100 that had been assessed at baseline were available and agreed to participate in the 1-year follow-up (Mean=1.4, S.D.=0.8). Except for a diagnosis of an affective disorder, which was slightly less prevalent among those who returned for the follow-up assessment, there were no significant differences between those who were available and those who lost for the follow-up assessment on any of the major socio-demographic or clinical variables at baseline. Consistent with our first hypothesis, SD at baseline predicted a significant amount of variance in APS change over time (R-squared=0.10, F=8.61, p=0.004). However, inconsistent with our second hypothesis, SD at baseline did not have a significant added contribution to the prediction of APS change when APS at baseline was controlled for (R-squared difference=0.02, F=1.83, p=0.18).

Discussion: These results provide preliminary support for a prospective association between SD and deterioration in prodromal symptoms among adolescents from the community. However, they fail to support an added value of SD over and above baseline APS for the prediction of APS deterioration. Because SD was assessed only at baseline, they leave unanswered the degree to which change in SD is associated with a change in APS and depression.

T212. THE INTRINSIC ORGANIZATION OF SYMPTOMS MARKS TRANSITION FROM HIGH-RISK STATE TO EARLY PSYCHOSIS: A PHENOMENOLOGICAL CONNECTIVITY STUDY

Lena Palaniyappan*, Tushar Das†, Fabienne Harrisberger‡, Undine E. Lang‡, Anita Riecher-Rössler*, André Schmidt*, Stefan Borgwardt‡

1University of Western Ontario; 2University of Psychiatry Clinics Basel (UPK)

Background: In psychiatric practice, when symptoms “come together” we call the resulting construct as a diagnosis. We believe that there is a disease process that binds together, enabling co-occurrence of varied symptoms. We use either diagnostic or syndromic labels to describe this construct (e.g. positive syndrome, negative syndrome, schizophrenia, at-risk mental state). An emerging idea, promoted by network theorists, is that symptoms may relate by their own intrinsic nature, with no external constructs bringing them together. E.g. paranoia leads to social withdrawal, loss of appetite leads to loss of weight etc. This intrinsic organisation of symptom relationships can be studied using network models by applying graph theory to symptom data.

Methods: We recruited 63 subjects with at-risk mental state [on the basis of Melbourne PACE criteria] but no transition (ARMS-NT), 16 that later developed psychosis (ARMS-T) and 38 drug-naïve patients with first-episode psychosis (FEP) from Basel, Switzerland. Symptoms were measured using Brief Psychiatric Rating Scale. Clinical symptoms can be construed as a system of individual elements (24 nodes) and their relationship (24x23 possible edges) within a group. We estimate each individual’s contribution to the intrinsic organisation of symptoms using a jack-knife bias estimation procedure. Bias values for each pair of symptoms in an individual subject quantified the contribution of that subject to the overall within-group relationship for that symptom pair. Higher values meant greater relationship between the two given nodes in that subject, relative to the rest of the group. We then used Graph Analysis Toolbox, with a range of binarization thresholds based on cost-density of connectivity to extract adjacency matrices.

Results: None of the 24 individual symptoms of BPRS significantly differentiated ARMS-NT from ARMS-T, though a number of symptoms (suspiciousness, hallucinations, disorganisation, motor retardation, hostility and suicidality) showed a gradient of FEP>ARMS-T>ARMS-NT (F test, FDR corrected p<0.05). The small-worldness (F=4.8, p=0.01) and the clustering coefficient (F=10.9, p<0.001) and modularity (F=10.9, p<0.001) of the symptom networks were notably different among the 3 groups, with a gradient of FEP>ARMS-T>ARMS-NT (except for modularity where FEP=ARMS-T). Post-hoc tests revealed significantly high clustering (Hedges’s g = 0.60, p<0.05) and high modular organisation (Hedges’s g = 0.81, p<0.01) of symptoms in ARMS-T compared to ARMS-NT. There were no differences between ARMS-T and FEP groups. In both ARMS-T and FEP groups, anxiety was the most central symptom. In addition to anxiety, the FEP group also had unusual thought content emerging as a central feature.

Discussion: To our knowledge, this is the first study to investigate the intrinsic phenomenological connectivity and its relevance to psychosis in the clinical high-risk population. Risk of transition to psychosis relates to the consolidation of relationship among symptoms (clustering and modularity), but appears unrelated to the severity of symptoms per se. First episode of psychosis could be thought of as a state of high modular clustering among otherwise sparsely connected symptoms. Incongruent clustering (e.g. blunting with anxiety) is reminiscent of Bleuler’s concept of ambivalence being a fundamental feature of psychosis. Deconsolidation of symptom clustering could be the key to prevent transition to frank psychosis in high-risk individuals. Reducing the bridging symptoms (esp. anxiety) could weaken the clinical core of a psychotic episode, complementing the pharmacological approaches of reducing dopamine transmission.

T213. THE EFFECT OF ACUTE STRESS ON PARANOID THINKING AND CORTISOL DURING SOCIAL INTERACTION IN HIGH AND LOW SCHIZOTYPES

James Gilleen*,†

1Institute of Psychiatry

Background: Paranoid thinking, a common symptom of psychosis and schizophrenia, manifests as a sense of threat and may also be indexed by a lack of trust. Stress, in turn, exacerbates psychosis and paranoia, and is a well-established risk factor for schizophrenia as well as a component in several models of psychosis. The present study aimed to determine the impact that acute stress has on paranoid thinking during social interaction in vivo in high (HSZ) vs low (LSZ) schizotypy using an iterated social reciprocity game. The main hypothesis was that HSZ would anticipate greater social threat and paranoia at baseline compared to LSZ, and moreover that experimentally-induced stress would exacerbate those differences, and thus show that stress differentially modulates how HSZ model the intentions of others.

Methods: Matched healthy participants were stratified into HSZ (N=17) and LSZ (N=17) groups and were administered a non-financial, social-reciprocity game against benevolent and malevolent opponents under both stress and no-stress conditions. Stress was manipulated using the MIST (Dedovic et al., 2005) stress paradigm. Cortisol was measured from saliva samples acquired before and after the MIST stress task. Anticipation of threat and trust scores were derived from the social interaction task.

Results: At baseline, cortisol levels were not significantly different between HSZ and LSZ but were significantly raised by the stressor task in HSZ (p<0.05) but not in LSZ. Higher cortisol at baseline (pre-stress) predicted greater initial and average anticipation of threat (both r=5, p<0.05) (no-stress) to other players; and lower initial trust ratings of malevolent, but not benevolent, players. The MIST task significantly elevated stress ratings compared to baseline (p<0.001) and following stress, greater change in cortisol from baseline to post-MIST was associated with lower trust ratings.
The current study investigated these phenomena at the broad symptom profile level, future research should investigate individual symptoms and their subtypes discretely, in order to inform a comprehensive, symptom-focussed model of elicited public stigma pertaining to schizophrenia.

T215. CLINICAL PREDICTORS OF HOSPITALIZATIONS IN FIRST EPISODE PSYCHOTIC PATIENTS: A NATURALISTIC FOLLOW UP STUDY

Olga Sparano*, 1, Pau Soldevila-Matias2, Carlos Gonzalez2, Lucia Bonet1, Esther Lorente1, Jose Miguel Carot3, Julio Sanjuan4
1Hospital Universitario de la Ribera; 2Hospital Clinico INCLIVA; 3Universidad Valencia; 4Hospital Clinico INCLIVA, CIBERSAM; 5Universidad Politecnica

Background: Some naturalistic longitudinal studies of first psychotic episodes of the last 50 years have suggested associations between psychopathology and the remission of symptoms and the clinical course of disease. A recent study in a large sample of patients with schizophrenia has obtained significant results using the number of hospitalizations as outcome variable. The main objective of this study is to know if clinical and sociodemographic variables predict the number of hospitalizations after the first psychotic episode

Methods: Naturalistic, longitudinal follow-up study in a sample of 212 patients of first-episode psychosis attending public mental health service in Area 5 of Valencia (Spain) in a period between 2010-2017. Of 212 patients, a total of 35 were included, excluding patients lost due to abandonment and death. The study included a) baseline variables: sociodemographic, risk factors (Cannabis use), clinical scales; PANSS, CGI (clinical global impression) and GAF (global assessment of functioning scale) and kind of treatment (oral versus injectable). b) outcome variables: number of visits to the emergency room, hospitalizations, and outpatient consultations.

Results: None of the psychopathological or treatment variables at baseline were significantly associated with the outcome variables. The younger patients have a significant (p < 0.01) higher number of emergencies room visit in the follow up.

Discussion: In contrast with previous reports (Tihonen J et al 2017)) we were not able to find any relationship between severity of illness (at baseline) or the kind of treatment (oral versus injectable) with the emergency room visits or number of hospitalizations.

The only significant result was related with the age of the patients. Younger patients have more probability of having more visits to the emergency room.

References:
1. Capdeville D. A multi-dimensional approach to insight and its evolution in first-episode psychosis: a 1-year outcome naturalistic study. Psychiatry Res. 2013 dec 30;210(3):835–41
2. Tihonen J. Real-World effectiveness of antipsychotic treatments in a Nationwide cohort of 29,823 patients with schizophrenia. Jama psychiatry. 2017;74(7):686–693

T216. THE CULTURAL EXPERIENCES OF PATIENTS DIAGNOSED WITH SCHIZOPHRENIA IN SOUTH AFRICA

Wilna Basson*
1Sefako Makgatho Health Sciences University

Background: Schizophrenia is a debilitating mental illness that affects people from all walks of life. Individuals attach meaning to their illness based on their cultural point of view; for some traditional black South Africans, causes of ill health are ascribed to culturally laden inferences. Some patients seek spiritual help before consulting medical doctors. This study aimed to...