Methods: Sample: 50 offender SMI patients recruited at the Residence for the Execution of Security Measures (REMS) of Castiglione d/S (case group) and 35 non-offender SMI patients recruited at the Department of Mental Health and Addictive Disorders of Brescia (control group). Match 1: 1 by gender, education and main diagnosis. An interview was given to collect the anamnestic data. All patients were assessed with clinical (CGI-S, PANSS-EC), neurocognitive (TMT, SCWT, BACS), social cognitive (FEIT), psychosocial functioning / wellness (MCH-SF, PSP), impulsiveness (BIS-11, IGT) and aggressive behaviour risk assessment (MOAS, HCR-20, PCL-R) measures.

Results: The two groups appeared to be significantly different as far as the total scores for both HCR-20 and PCL-R, with REMS patients have significant higher values. HCR-20 and PCL-R showed a significant predictive value independent of each other, in determining membership of the case group or control group. In particular, each additional point in the HCR-20 increased the probability of belonging to the case group of 1.8, while each additional point at the PCL-R increased this probability by 1.3. Significant differences were observed regarding the CGI-S and the PANSS-EC scores, where REMS patients had, at the same diagnosis, more severe psychopathology. PANSS-EC, BACS token test and SCWT errors showed a significant independent predictive value in HCR-20 score. In particular, for each additional point at the PANSS-EC, the HCR-20 increased 1 point, while this score is reduced by 0.16 for each additional point to the BACS token test and 0.42 for each additional point to the SCWT errors. Considering the cognitive profile, poorer performances were found in the offenders patients in the TMT-A and the BACS token exercise, indicating greater deficits in both visuomotor speed and attention. Regarding school performance (a possible proxy of cognitive reserve), the two groups appeared significantly different for the number of failures (p<0.012), which is higher among REMS patients. Friend relationships were more associated with PCL-R factor 2 (p<0.05). HCR-20 showed a strong association with both PCL-R factors and the total score (p<0.001), as well as CGI-S (p<0.005) and PSP (subscale A) (p<0.001). FEIT (happiness), friend relationships, PSP (subscale A), MHC-SF (social and psychological subscales) were independently associated with the PCL-R total score. The difference regarding the use of hashish lifetime, which is greater in the group of cases, appeared significant.

Discussion: Results of the present study highlight that offenders patients with SMI have higher levels of clinical, cognitive and friends relationships severity, but better social cognition skills and a higher degree of perceived well-being. The greatest number of failures in REMS patients could be due to a greater impairment of cognitive function from an early stage of the disease. Even if the majority of crimes is carried out against the family members, family relationships do not present differences between the two groups. Although preliminary, these results could help clinicians to better understand offenders patients with SMI and to identify more homogeneous subgroups of patients, in order to plan more tailored care pathways.

Psycho-pathology, anxiety state of patients, psychosocial functional state and subjective well-being were examined by Positive and Negative Symptom Scale (PANSS), Hamilton Anxiety Inventory (HAM-A), Social and Occupational Functioning Assessment (SOFAS) and Satisfaction with Life Scale (SWLS), respectively. Comparisons of data were done between patients with metabolic syndrome and without metabolic syndrome.

Results: Fifty-four (54.5%) of 99 patients had satisfied the criteria of metabolic syndrome. Patients with metabolic syndrome showed significant higher negative symptoms scores in PANSS (p<0.05) and HAM-A scores (p<0.05) than patients without metabolic syndrome. Age, sex, smoking status, age at onset, duration of illness, scores of SOFAS and SWLS were not differed between two groups. Data of HRV were transformed to log values to satisfy the hypothesis of normal distribution of curve. SDNN of Time domain was significantly differed between two groups (p<0.05). Activation of autonomic nerve, resistance of stress, index of stress, rate of fatigue and heart stability were also significantly differed between groups (p<0.05, respectively). Multiple linear regression was done to explore which factors were associated with HRV and metabolic syndrome. Metabolic syndrome was negatively influenced to InTP, InVLF, InLF and InHF of HRV (frequency domain).

Discussion: This study suggested that metabolic syndrome was negatively influenced to the frequency domain of HRV in chronic schizophrenic patients.

T76. RETROSPECTIVE ADHD SYMPTOMS IN EARLY PSYCHOSIS: RELATION TO CURRENT SYMPTOMS AND PSYCHOSOCIAL FUNCTIONING

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Background: Individuals with psychosis have a 2–5 times higher prevalence of ADHD than the general population. Individuals with early psychosis (EP) with an ADHD history have poorer premorbid social and role functioning, a more challenging symptom course, and poorer long-term psychosocial outcomes. The high degree of overlap in cognitive profiles for both psychosis and ADHD highlights a need for additional research. This project sought to assess the relation between historical report of childhood ADHD symptoms, current psychosis symptoms, and psychosocial functioning in individuals with EP. It is hypothesized that ADHD symptoms will significantly predict functioning.

Method: Individuals, aged 12–30, who experienced the onset of psychotic symptoms in the past 2 years and presented for care at UCD Davis EP clinics, were consented and enrolled. Individuals provided retrospective self-report ratings of childhood (between ages 5–12) symptoms of ‘inattention’ and ‘hyperactivity/impulsivity’ on the Barkley ADHD Rating Scale. Raters coded current psychosocial (Global Social/Role Functioning [GSF/GRF]) and clinical functioning ([Brief Psychiatric Rating Scale [BPRS], Scale for Assessment of Positive [SAPS] and Negative [SANS] Symptoms] at presentation. BPRS, SAPS, and SANS ratings were combined into ‘reality distortion,’ ‘poverty,’ and ‘disorganization’ domains. Medical chart review will be conducted to identify historical report of ADHD diagnosis. Multiple linear regression was used to examine relative contribution of demographic variables, clinical symptoms, and self-reported childhood ADHD symptoms to current social and role functioning.

Results: Ninety-eight participants (20.22 ± 3.95; 39% female; 37% non-Hispanic White; 27% Hispanic; 2% missing demographics) provided complete data. Childhood inattention, poverty, and disorganized symptoms predicted current GSF (R-squared = .39, F[5, 92] = 11.92, p < .001). When assessing demographic differences on outcomes, GSF was rated significantly higher in non-Hispanic White (M = 7.03, SD = 1.80) compared to other non-White participants (M = 6.28, SD = 1.64; [94] = -2.08, p = .04). With the inclusion of race as a predictor, only poverty and disorganization predicted current GSF (R-squared = .40, F[6, 89] = 10.04, p < .001). Poverty symptoms predicted current GRF, while childhood ADHD and other

T75. METABOLIC SYNDROME AND HEAR RATE VARIABILITY IN SCHIZOPHRENIC INPATIENTS

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Background: The purpose of this study was to explore the relationships between metabolic syndrome and markers of heart rate variability (HRV) in chronic schizophrenic inpatients

Methods: A total of 99 schizophrenic inpatients was included in this study. Metabolic syndrome of patients was defined according to the revised NCEP-ATP III criteria. HRV was measured by SA-3000P (Medi-core, Seoul, Korea).
psychosis symptoms did not predict GRF (R-squared = .31, F[5, 92] = 8.09, p < .001). Age significantly correlated with GRF (r = -.31, p = .002). Poverty remained a significant predictor of GRF after including age (R-squared = .37, F[6, 89] = 8.84, p < .001). Additional cognitive correlates, collateral report of childhood ADHD symptoms, prior diagnoses, date of psychosis illness onset, and medication history will also be examined.

Discussion: Social functioning was predicted by childhood self-rated inattention and current negative and disorganized symptoms; however, the relation with childhood inattention did not remain after controlling for race/ethnicity. Additional analyses will be conducted to assess if race is presenting as a proxy for other social determinants, including insurance designation, in this sample. Individuals with ADHD experience more difficulty in social settings compared to typically developing peers, possibly due to increased need to use environmental cues; for individuals who go on to develop psychosis, these childhood events are possibly perceived as more stressful, adding to risk for psychosis. However, it is unclear if self-report childhood inattention – captured here as a putative symptom of ADHD – may be better accounted for by premorbid cognitive impairment associated with risk for psychosis. Additional research is required to establish this connection.

Background: A number of studies have reported association between Toxoplasma gondii and Chlamydia infection and the risk of schizophrenia. The aim of the present study was to compare the prevalence of T. gondii and Chlamydia infection between the schizophrenia and normal control subjects and to compare the clinical features between seropositive and seronegative schizophrenia patients.

Methods: The rate of serum reactivity to T. gondii, Chlamydia trachomatis (C. trachomatis), Chlamydia pneumonia in 96 schizophrenia and 50 control subjects was investigated using enzyme-linked immunosorbent assay and indirect fluorescent antibody technique. The clinical symptoms of the schizophrenia patients were scored with Positive and Negative Syndrome Scale and a comparative analysis was carried out.

Results: A significant positive association between immunoglobulin G (IgG) antibodies to T. gondii and C. trachomatis in schizophrenia was found, and the odds ratio of schizophrenia associated with IgG antibody was found to be 3.22 and 2.86, respectively. The Toxoplasma-seropositive schizophrenia patient had higher score on the negative subscale N1 and N7 and general psychopathology subscale G13, while C. trachomatis-seropositive schizophrenia patient had higher score on the general psychopathology subscale G10.

Discussion: The results from the present study suggest significant association between T. gondii, C. trachomatis infection and schizophrenia. In future, further studies are needed to elucidate the correlation between the two types of infection and schizophrenia.

T77. ASSOCIATION BETWEEN INTRACELLULAR INFECTIOUS AGENTS AND SCHIZOPHRENIA

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Background: A number of studies have reported association between Toxoplasma gondii (T. gondii) and Chlamydia pneumonia and the risk of schizophrenia. The aim of the present study was to compare the prevalence of T. gondii and Chlamydia pneumonia infection between the schizophrenia and normal control subjects and to compare the clinical features between seropositive and seronegative schizophrenia patients.

Methods: The rate of serum reactivity to T. gondii, Chlamydia trachomatis (C. trachomatis), Chlamydia pneumonia in 96 schizophrenia and 50 control subjects was investigated using enzyme-linked immunosorbent assay and indirect fluorescent antibody technique. The clinical symptoms of the schizophrenia patients were scored with Positive and Negative Syndrome Scale and a comparative analysis was carried out.

Results: A significant positive association between immunoglobulin G (IgG) antibodies to T. gondii and C. trachomatis in schizophrenia was found, and the odds ratio of schizophrenia associated with IgG antibody was found to be 3.22 and 2.86, respectively. The Toxoplasma-seropositive schizophrenia patient had higher score on the negative subscale N1 and N7 and general psychopathology subscale G13, while C. trachomatis-seropositive schizophrenia patient had higher score on the general psychopathology subscale G10.

Discussion: The results from the present study suggest significant association between T. gondii, C. trachomatis infection and schizophrenia. In future, further studies are needed to elucidate the correlation between the two types of infection and schizophrenia.

T78. MORTALITY IN PATIENTS WITH SCHIZOPHRENIA ADMITTED FOR INCIDENT ISCHEMIC STROKE: A POPULATION-BASED COHORT STUDY

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Background: Evidence shows that schizophrenia is associated with increased incidence of cardiovascular diseases (CVD), including stroke. The relationship between schizophrenia and post-stroke mortality was understudied, and mixed findings were observed. Of note, none of these studies specifically explored the association of schizophrenia with short-term mortality after incident ischemic stroke. One of them specifically examined short-term mortality following ischemic stroke in schizophrenia patients, but it did not address potential confounding by patients who had past history of stroke. The only study which included solely incident stroke patients indicated that patients with psychotic disorders experienced higher short-term mortality ensuing incident stroke.

Methods: We conducted a retrospective cohort study to investigate short-term mortality of schizophrenia patients after incident ischemic stroke. All individuals admitted for incident ischemic stroke between 2006 and 2016 in Hong Kong were identified using a territory-wide electronic health record database. 8171 patients with an ICD-10 diagnosis of schizophrenia (F20) or schizoaffective disorder (F25) (termed schizophrenia henceforth) prior to index admission constituted the study group. The comparison group comprised 8170 patients (1:1 matched to schizophrenia patients on age, sex, treatment sites and calendar-period for index admission) without any non-ffective psychoses, manic or bipolar disorder (F20, F22-25, F28-31).

Results: Multivariate logistic regression revealed that schizophrenia patients had higher 1-year (OR [95% CI] = 1.51 [1.22 – 1.85]) and marginally higher 30-day (OR [95% CI] = 1.34 [1.00 – 1.79]) mortality following incident ischemic stroke, after adjusting for medical comorbidities, including hypertension, diabetes, hyperlipidemia, alcohol and substance use disorders and other comorbidities quantified by Charlson-Deyo comorbidity index. Additional age- (<65 years and ≥65 years) and gender-stratified analyses revealed similar results. Elevated 1-year mortality was exhibited by all schizophrenia subgroups, being more pronounced in younger patients (OR [95% CI] = 2.02 [1.38 – 2.96]). Increase in 30-day mortality was only seen in younger (OR [95% CI] = 1.75 [1.04 – 2.95]) and male (OR [95% CI] = 1.63 [1.06 – 2.50]) schizophrenia patients.

Discussion: Our results of heightened short-term post-stroke mortality in schizophrenia were in line with the only previous study which compared short-term mortality ensuing incident stroke in patients with and without psychotic disorders. This intuitive result may be explained by some studies which demonstrated that schizophrenic stroke patients were less likely to receive reperfusion treatments and prophylactic medications. The absence of data on lifestyle factors, antipsychotic treatment and post-stroke management is a major limitation in our study. In conclusion, our results indicated that schizophrenia is associated with increased short-term mortality after incident ischemic stroke. Further research is warranted to clarify the contribution of possible risk factors to post-stroke mortality in schizophrenia patients.

T79. BALANCING EFFECTS WITH SIDE-EFFECTS: EXAMINING COMPARATIVE METABOLIC CONSEQUENCES OF 18 ANTIPSYCHOTICS IN TREATMENT OF SCHIZOPHRENIA USING NETWORK META-ANALYSIS

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Background: Antipsychotic treatment is associated with metabolic disturbance. However, the relative degree to which metabolic alterations occur...