

of diabetic complications. We aimed to study incidence of diabetic complications diagnosed in hospitals following a diabetes diagnosis and subsequent mortality in individuals with schizophrenia compared to individuals without.

Methods: The entire Danish population was followed in 1997–2016 using population-based registries. Incident diabetes was defined as prescription redemptions of insulin or oral antidiabetic drugs, ICD-10 diagnoses E10 or E11 related to hospital contacts, whichever came first. Diabetic complications were separated into macrovascular complications (coronary heart disease, peripheral artery disease, stroke+TCl, heart failure, myocardial infarction, foot ulcer) and microvascular complications (retinopathy, neuropathy, nephropathy).

Cox regression was used to estimate incidence rate ratios (IRR) and mortality rate ratios (MRR) and all estimates were adjusted for age and calendar time.

Results: The incidence rate of macrovascular complications was similar in individuals with schizophrenia and in those without; IRR=1.09 (95% CI: 0.96–1.23) for females and IRR=0.91 (95% CI: 0.83–1.01) for males. For foot ulcer the incidence rate was higher in females with schizophrenia than in females without; IRR=1.79 (95% CI: 1.12–2.85), $p=0.015$ and for heart failure the incidence rate was higher in males with schizophrenia than in males without; IRR=1.52 (95% CI: 1.21–1.91), $p<0.000$. The incidence rate for microvascular complications was similar for females with and without schizophrenia; IRR=0.88 (95% CI: 0.75–1.04), but lower in males with schizophrenia than in males without schizophrenia; IRR=0.79 (95% CI: 0.69–0.89), $P<0.001$.

The mortality rate following a diagnosis of a macrovascular complication was higher in individuals with schizophrenia than those without; MRR=2.17 (95% CI: 1.84–2.56) for females and MRR=2.40 (95% CI: 2.06–2.80) for males. For microvascular complications the subsequent mortality rate was also higher in individuals with schizophrenia than in those without; MRR=2.17 (95% CI: 1.67–2.80) for females and MRR=2.30 (95% CI: 1.90–2.79) for males. $P<0.001$ for all estimates. The Mortality rates for every single complication showed similar estimates.

Discussion: Unexpectedly, we found individuals with comorbid schizophrenia and diabetes mellitus to have a similar or lower rate of diabetic complications diagnosed in hospitals compared to individuals with diabetes mellitus only. However, we still found an excess mortality following a diagnosis of a diabetic complication among individuals with schizophrenia. These results may indicate that individuals are not even seen in hospitals with their diabetic complications and hence indicate an increased need for improved somatic care of individuals with schizophrenia if the burden of diabetes mellitus morbidity and mortality should be reduced.

O6. Oral Session: Neuroimaging

O6.1. HIPPOCAMPAL VOLUME IN ADOLESCENTS WITH PERSISTENT PSYCHOTIC EXPERIENCES: A LONGITUDINAL POPULATION-BASED MRI STUDY

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Background: Individuals with schizophrenia show significant brain morphological abnormalities. The ENIGMA consortium identified that patients with schizophrenia had smaller hippocampus, amygdala, thalamus, accumbens and intracranial volumes.¹ Reduced hippocampal volume is one of the most consistent findings in schizophrenia research.^{2–4} Also, previous research has reported differences in hippocampal volume and white matter integrity in young adolescents who report psychotic experiences.^{5,6} However there has been little longitudinal research to investigate the developmental

trajectory of these regions in adolescence with an increased susceptibility to psychotic disorders.

Aims: to investigate two-year longitudinal changes in hippocampal volume in a sample of adolescents who reported psychotic experiences relative to their peers. To investigate the role of presence of co-morbid DSM IV mental disorders and stressful life events in influencing hippocampal volume and study the differences in hippocampus volume between adolescents who were having persistent symptoms versus adolescents with remitting symptoms.

Methods: A longitudinal case-control study of 50 community-based adolescents aged 13–16 years (25 with psychotic experiences and a matched sample of 25 without psychotic experiences), compared hippocampal volume. All participants were assessed at baseline and two years follow up. T1 weighted anatomical high-resolution imaging and high angular resolution diffusion imaging data were used to conduct quantitative anatomical volumetric evaluations of global hippocampal volume. Clinical interviews also provided information on psychotic experiences, co-morbid disorders and adverse life events.

Results: There were significant differences in the Right and Left Whole hippocampus between PE and Control group at baseline and 2-year follow up ($p\leq 0.05$). There were significant differences between PE persist and Control group in the left and right whole hippocampus ($p\leq 0.05$).

Discussion: The differences identified in our study suggest that early hippocampal reductions, may play a role in increasing vulnerability to psychosis.

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O6.2. NEUROBIOLOGY OF PSYCHOMETRIC SCHIZOTYPY: INSIGHTS FROM MULTIMODAL IMAGING RESEARCH

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Background: The continuum approach to psychosis proposes a dimensional continuity between the neurobiology of subclinical psychotic-like experiences in healthy individuals (or schizotypy) and psychotic symptoms in clinically relevant psychosis (Linscott and van Os, 2013, Nelson et al., 2013). Preclinical models propose that cortical glutamate dysfunction related to cortico-limbic-striatal hyper-responsivity to stress may underlie both hippocampal and striatal overdrive as well as gray matter loss associated with schizophrenia-like behaviors (Berretta et al., 2001, Lodge and