O5.2. PREDICTORS OF CARDIOMETABOLIC RISK IN THE YEAR AFTER ONSET OF PSYCHOSIS: A PROSPECTIVE COHORT STUDY

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Background: The first episode of psychosis (FEP) is a critical time to prevent the onset of weight gain, cardiovascular and metabolic disease. However, little is known about the influence of patient characteristics and lifestyle on these outcomes.

Methods: We conducted a prospective cohort study over 12 months of 294 people with FEP investigating the influence of lifestyle factors and medication on cardiometabolic outcomes over 12 months. Information on sociodemographics, lifestyle (physical activity (PA), sedentary behaviour (SB) nutrition, smoking), medication and service use and mental health symptoms was collected at baseline and after twelve months.

Results: There were high rates of cardiometabolic abnormalities and unhealthy lifestyle choices on first presentation with psychosis, increasing over the subsequent 12 months. Obesity rates rose from 17.8% to 23.7% while the proportion with Hba1c levels ≥39mmol/mol rose from 12% to 23.7%. White participants were more at risk of developing central obesity while there were highly clinically relevant increases in mean Hba1c in those of non-white ethnicity from 36.4 to 39.7mmol/mol. We found no association between lifestyle or medication with either baseline or 12-month cardiometabolic outcomes.

Discussion: Cardiometabolic risk factors and unhealthy lifestyle behavior are already prevalent in those with early psychosis and worsen in the year following first presentation, making this an important time for preventative strategies. We found no evidence however that such strategies should be preferentially directed towards those reporting less healthy lifestyle habits. Patterns of emergence of cardiometabolic risk over the first year of psychosis varied by ethnicity.

O5.3. A COMPREHENSIVE NATIONWIDE STUDY OF COMORBIDITY WITHIN TREATED MENTAL DISORDERS – A DANISH REGISTER-BASED STUDY

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Background: Comorbidity has been the focus of a substantial body of research and it is acknowledged that different mental disorders tend to co-occur more frequently than expected. Many studies of mental disorder comorbidity have been published in recent decades, but these studies tend to be restricted to subsets of disorders, and are difficult to combine based on different methodologies. There is a need to examine comorbidity within mental disorders in a manner that covers a comprehensive range of mental disorders. The aim of this study was to use high-quality registers to (a) provide bidirectional pairwise estimates between the major groups of mental disorders, (b) investigate if associations changed depending on time since first diagnosis, (c) explore sex-specific patterns of comorbidity, and (d) estimate absolute risks rather than only incidence rate ratios of developing certain disorders after being diagnosed with one specific disorder. This abstract focuses on results based on schizophrenia.

Methods: We designed a population-based cohort study including all Danish residents between 2000 and 2016 (N = 5,940,778). Information on incident cases of mental diseases was obtained from the Danish Psychiatric Register, and we classified different disorders into 10 main groups: organic mental disorders (ICD10 F00-F09), substance abuse disorders (F10-F19), schizophrenia spectrum disorders (F20-F29), mood disorders (F30-F39), neurotic disorders (F40-F48), eating disorders (F50), personality disorders (F60), mental retardation (F70-F79), pervasive developmental disorders (F84) and behavioural and emotional disorders (F90-F98). We examined associations between all pairs of mental disorders. Hazard ratios (HR) were estimated using Cox Proportional Hazards models with age as time scale, and adjusting for sex, calendar time and other psychiatric comorbidity. Finally, we estimated the absolute risk of being diagnosed with other mental disorders after being diagnosed with a specific disorder.

Results: All mental disorders were associated between them, with HR ranging from 1.1 to 19.5. There were 21,909 men and 20,106 women who were diagnosed with schizophrenia spectrum disorder (SSD) for the first time between 2000 and 2016. After onset of SSD, the rate of being diagnosed with substance abuse disorders was more than 4 times higher, compared to those without SSD (HR=4.4 [95%CI: 4.3–4.5]); the difference was larger within the first 6 months after being diagnosed with SSD (HR=31.8 [95%CI: 30.5–33.1]), although the rates remained higher even 15 years after the diagnosis (HR=3.2 [95%CI: 3.0–3.4]). Within the first 10 years after diagnosis of SSD, 23.8% [95%CI: 23.1–24.5] of men and 10.6% [95%CI: 10.2–11.1] of women were diagnosed for the first time with substance abuse disorders. Regarding mood disorders, the incidence rate was almost 3 times higher on individuals previously diagnosed with SSD than undiagnosed (HR=2.7 [95%CI: 2.6–2.7]). Analogous time-trends were observed, with larger differences within the first 6 months after diagnosis (HR=18.8 [95%CI: 18.1–19.6]), which diminished but remained higher 15 years later (HR=2.3 [95%CI: 2.2–2.4]). A total of 15.1% [95%CI: 14.5–15.6] of men and 20.8% [95%CI: 20.2–21.5] of women with a diagnosis of SSD were diagnosed with mood disorders within 10 years.

Discussion: In this population-based comprehensive study, we observed that comorbidity is pervasive and usually bidirectional. We observed that after being diagnosed with a specific disorder, the risk of being diagnosed with an additional disorder is particularly higher in the first 6 months, but even after 15 years the risk is higher compared to undiagnosed individuals.

O5.4. NATURAL CAUSE MORTALITY IN PERSONS WITH SCHIZOPHRENIA AND BIPOLAR DISORDER

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Background: It is now well established that persons with schizophrenia and bipolar disorder have a reduced life expectancy but the reasons for this premature mortality are not known with certainty. The aim of the current investigation was to identify the determinants of natural-cause mortality in a cohort of individuals with schizophrenia or bipolar disorder. To our knowledge, our investigation is unique in studying patients who were assessed at baseline with an in-person clinical assessment and blood sample and then subsequently evaluated regarding their mortality status and cause of death.

Methods: Persons with schizophrenia (n=789) and bipolar disorder (n=498), mean age of 38 (s.d. 12.6) years, underwent an in-person clinical assessment. They also had a blood sample drawn which was tested by enzyme immunoassay tests for IgG class antibodies to Herpes Simplex Virus type 1 (HSV-1), Cytomegalovirus (CMV), Epstein Barr Virus Nuclear Antigen (EBV), Human Herpesvirus Type 6 and Toxoplasma gondii. Participants were followed for a median observation period of 7.87 years (range 1 day – 16.9 years); the total number of person-years of observation was 10,859.3 person-years. Mortality was subsequently determined utilizing data from the US National Death Index.