35. PREVENTION OF PSYCHOSIS: AN INDIVIDUAL OR POPULATION APPROACH?

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Overall Abstract: Psychotic disorders and schizophrenia in particular have a profound impact on patients, their caregivers and society. Mental illness is set to overtake cancer and cardiovascular disease to become the most expensive disorder in terms of direct expenditure and disability-adjusted life years over the next decade. Unfortunately, mental health has lagged behind physical disorders in terms of focus on prevention. It is imperative that prevention is taken more seriously for mental health disorders. In this symposium we present novel data and novel perspectives on risk and protective factors for psychosis from the viewpoint of prevention.
Data will be presented from large population based studies from England, France, Italy, Netherlands, Spain, and Brazil and Denmark Danish These include epidemiological studies of first episode psychosis (FEP) (both single centre and multicentre) and large register- based studies.
Olesya Ajnakina will show that only 4.1% of a sample of young adults with first episode psychosis diagnosed over a two year period had actually been seen previously by the prodromal services. This indicates that this "At risk mental state" approach is not useful for prevention of psychosis at a population level. Hannah Jongsma will present data from the EU-GEI large multicentre study showing an association between greater catchment area-level owner-occupancy and lower incidence of psychosis. She also replicated the well-established finding on increased risk for psychosis among minority groups. These findings show that we need to tackle societal factors rather than remaining focused on an individual level approach. Using register data from Denmark, Kristine Engemann Jensen reports a novel protective factor for psychosis – childhood exposure to green space. This shows the importance of the built environment for mental health – particularly for young people. Finally, Sir Robin Murray gives his particular insights on how we can prevent psychosis using data from three first episode psychosis studies. He shows, for instance, that 24% of psychosis cases could theoretically be prevented by eliminating use of high-potency cannabis use in the population. He argues that psychiatrists and psychologists need to get involved in promoting societal and legislative approaches to reducing known risk factors for psychosis. Our discussant Andreas Meyer-Lindenberg will draw on all these findings, along with his own work on risk factors such as urbanicity, in discussing how we can now move to a new prevention-focused paradigm of research on psychosis.

35.1 ONLY A SMALL PROPORTION OF PATIENTS WITH FIRST EPISODE PSYCHOSIS COME VIA PRODROMAL SERVICES: A RETROSPECTIVE SURVEY OF A LARGE UK MENTAL HEALTH PROGRAMME

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Background: Little is known about patients with a first episode of psychosis (FEP) who had first presented to prodromal services with an "at risk mental state" (ARMS) before making the transition to psychosis. We set out to identify the proportion of patients with a FEP who had first presented to prodromal services in the ARMS state, and to compare these FEP patients with FEP patients who did not have prior contact with prodromal services.
Methods: In this study information on 338 patients aged ≤37 years who presented to mental health services between 2010 and 2012 with a FEP was examined. The data on pathways to care, clinical and socio-demographic characteristics were extracted from the Biomedical Research Council Case Register for the South London and Maudsley NHS Trust.
Results: Over 2 years, 14 (4.1% of n=338) young adults presented with FEP and had been seen previously by the prodromal services. These ARMS patients were more likely to enter their pathway to psychiatric care via referral from General Practice, be born in the UK and to have had an insidious mode of illness onset than FEP patients without prior contact with the prodromal services.
Discussion: In the current pathways to care configuration, prodromal services are likely to prevent only a few at-risk individuals from transitioning to psychosis even if effective preventative treatments become available.

35.2 PREVENTING PSYCHOSIS: WHAT, (IF ANYTHING) CAN WE LEARN FROM THE EU-GEI INCIDENCE STUDY?

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Background: The incidence of psychotic disorders varies across replicable social and environmental gradients at both an individual and a population level, such as higher rates of disorder in urban and migrant populations. However, the factors underpinning this are unclear. The EU-GEI study was established to investigate the incidence as well as the genetic and environmental determinants of first episode psychosis in a multi-national setting. The aim of the present study was to investigate the variance found in the incidence across the 17 catchment areas in the 6 countries (England, France, Italy, the Netherlands, Spain and Brazil) included in this study at both individual and population level, and identify putative predictors of psychosis risk.
Methods: We conducted a population-based study of the incidence of non-organic adult ICD-10 psychotic disorders (F20-F33). Demographic data (age, sex, ethnicity) and OPCRIT diagnoses were collected, and denominator data was estimated from government sources. Crude incidence rates were directly standardised to the 2011 England and Wales Census population to account for population differences in age, sex and ethnicity. Multilevel Poisson regression was carried out to investigate variance in incidence between catchment areas by latitude, population density, and percentage of unemployment, owner-occupied houses and single-person households as markers of catchment-area level social fragmentation, using official government statistics and data from the 2011 European Population and Housing Census.
Results: We identified a total of 2,774 cases over 12.94 million person-years at risk, leading to a crude incidence of 21.4 per 100,000 person-years (95%CI: 19.4–23.4). The age pattern of incidence differed between men and women: crude incidence peaked in men aged 18–24 (61.0 per 100,000 person-years, 95%CI: 59.0–63.1) and declined sharply thereafter, for women rates also peaked in the youngest age group (27.0 per 100,000 person-years, 95%CI: 24.9–29.1) but decline was more gradual and there was a small but robust secondary peak after age 45. By age 35, 68% of male cases had presented to services, compared to 51% of female cases. Age-sex-ethnicity standardised incidence of all psychotic disorders varied 8-fold across settings. Poisson regression revealed higher rates in minority groups (IRR: 1.6, 95%CI: 1.5–1.7), and an association between greater catchment area-level owner-occupancy and lower incidence (IRR for a 10% increase: 0.8, 95%CI: 0.7–0.8). No relationship was found for other putative environmental risk factors, including latitude and population density. Results were similar for non-affective and affective disorders.
Discussion: Variance in treated incidence was substantial and was only partially explained by standardisation for age, sex and ethnicity, and Poisson regression including catchment-area level risk factors. For the prevention of psychosis two main lessons can be learned: services focused on early intervention should not have an upper age limit as half of all female (and 32% of male) cases present after age 35, and future examinations of variance should focus on socioenvironmental and not geographical determinants.