Synopsis no.: *S2.53*

Preliminary title: Impact of social disadvantage on psychosis incidence: finding from the multi-center EU-GEI study.

Contact info for the person(s) proposing the synopsis

Name: Simona Ausilia Stilo
Partner no: 2/IoP
e-mail address: simona.stilo@kcl.ac.uk

Publication category: 2

Working and writing group: S Stilo, C Morgan, C Gayer-Anderson, M Di Forti, R Murray …..etc.

Work Packages involved: WP2

Partners involved from whom candidate co-authors (*additional to working and writing group*) should be nominated:

Objectives (scientific background, hypothesis, methods, and expected results):

Social disadvantage in childhood and in adulthood has been associated with an increased risk of schizophrenia and other psychoses (Morgan et al. 2008, Agerbo et al. 2004, Stilo et al. 2013). However, most of the studies have been conducted in UK and in the United States, and it is unclear whether the same pattern occurs also in other Countries, including Southern Europe and Latin America. Indeed, other risk factors for psychosis show different prevalence across the globe.

The main objective of this work is to explore the association between childhood and adulthood social disadvantage and psychosis in each of the countries participating to the unique EU-GEI study (UK, France, Netherlands, Spain, Italy, and Brazil).

Aims and Hypotheses:

1. To compare the prevalence of specific markers of current and long term social disadvantage in childhood (separation from and death of a parent, socio-economic status) and in adulthood (unemployment, living alone, being single, living in rented house, living in overcrowding condition, receiving an income below official poverty) in patients suffering their first episode of psychosis and in a control sample. We hypothesize that all current and long-term indicators of social disadvantage will be

associated with an increased odds of psychosis, independent of potential confounders (age, gender, ethnicity, social class, place of birth, cannabis use, premorbid IQ, and family history of mental illness/psychosis).

2. To explore cumulative effects and long-term associations (disadvantage in childhood, 5 yers pre-onset, 1 year pre-onset, at onset, at assessment) of social disadvantage. We expect that the greater the number of indicators present and the longer exposure will result in progressively greater risk of psychosis (linear relationship).
3. To explore the prevalence of social disadvantage by Country. We hypothesize that the association (odds ratios) between social disadvantage and psychosis, although may vary by place, will be replicated in every Country participating to the study.
4. To explore the association between childhood and adulthood social disadvantage. In a longitudinal perspective, we hypothesize that the subjects who experienced childhood social disadvantage will be more likely to experience adulthood social disadvantage.
5. To develop and test a hypothesised model of how the variables of interest may interact or connect on causal pathways to psychosis.

Expected results: See hypotheses

Methods

All cases with a suspected first episode of psychosis [FEP] and controls recruited in the WP2 sites of the EUGEI study:

Inclusion Criteria:

Cases:

- Age 18 to 64 at first presentation
- Resident within a clearly defined catchment (study) area
- Presence of an untreated first episode of psychosis (even if long-standing) (ICD-10: F20-29; F30-33 [DSM equivalents: 295.xx to 298.xx]) during the study period

Controls:

- Age 18 to 64
- Resident within a clearly defined catchment (study) area
- No evidence of current or past psychosis (including treatment with antipsychotic medication)

Exclusion Criteria:

Cases:

- Treatment (broadly defined as contact with mental health services) for an episode of psychosis outside of the study period
- Evidence of psychotic symptoms precipitated by an organic cause
- Transient psychotic symptoms resulting from acute intoxication as defined by ICD-10

Controls:

- Current or past psychotic disorder (or treatment within antipsychotic) (including diagnosis or treatment within time frame of the study)

Data needed for the study:

- Case-control status
- MRC Sociodemographic Schedule Parts 1 and 2
- Childhood Experiences of Care and Abuse
- Cannabis Experiences Questionnaire
- WAIS (IQ)
- Family Interview for Genetic Studies

Plan for statistical analysis (overall strategy):

1) We will begin by producing descriptive statistics (frequencies and percentages; means and standard deviations etc.) for cases and for controls on the main exposures both overall and by study site.

2) We will test Hypothesis 1 by quantifying associations between the main exposures and case-control status in terms of odds ratios derived from logistic regression with and without a priori confounders.

3) We will test Hypothesis 2 by constructing a cumulative score for social disadvantage in childhood (range 0-3) and in adulthood (range 0-6) by examining effects (odds ratios) at 5 points in time.

4) Results will be stratified by study site using Mantel-Haenszel tests for homogeneity of odds ratios

5) We will test Hypothesis 5 by examining the association between social disadvantage in childhood and in adulthood (odds ratios).

6) We will test additive interaction between social disadvantage in childhood and in adulthood to clarify whether the two interact to increase the odds of psychosis, over and above the effect of each alone, and will apply Structural Equation Modelling (SEM) to test causal relationship between variables.

Other analyses/methods: None
Involvement of external Parties (non EU-GEI): None
IPR check:
Timeframe: 3 months from data being available, publication max by December 2020
Additional comments: