

Poster #88**INCIDENCE OF PSYCHOTIC DISORDERS IN PALERMO: PRELIMINARY DATA**

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Background: The incidence of psychotic disorders varies in different geographical areas (McGrath 2004). Recent data suggest that the incidence is higher in males, migrant minorities and in urban areas. There aren't many available epidemiological data on the incidence of psychotic disorders in Italy. This is the first incidence study on psychotic disorders carried out in Palermo, the capital of Sicily.

Methods: we screened all patients presenting with their first episode of psychosis to the mental health services of our catchment area (5 inpatient, 5 outpatient units and 3 private psychiatric hospitals) over a period of three years (2008-2011). The diagnosis of psychosis was defined using the Schedules for Clinical Assessment in Neuropsychiatry (SCAN Wing, J. K., et al., 1990). The main socio-demographic data were collected using the MRC Social Data Schedule. When subjects were not available (did not consent) for interview, information was collected from clinical notes. The population at risk referred to the people aged from 18-65 who were resident in the same catchment area (Palermo Municipality) in the period considered, according to the data of the Statistic Office of Palermo Municipality).

Results: we identified 216 patients affected by a first episode of psychosis (FEP): 135 M (62.5%) and 81 F (37.5%), mean age 31.42 years (SD: 11.44). 77.1% of FEP had a diagnosis of non affective psychosis, 12.8% of affective psychosis and 10.1% received a diagnosis of other psychosis. 204 subjects were Caucasian, 12 non Caucasian belonging to various ethnicities and they were all first generation migrants (4 Indian, 3 African, 2 Bangladeshi, and 3 Mixed). Population at risk is 425.194 people. The mean age of onset was lower in men than women M: 29.98 years (SD: 10.41) vs. F: 34.28 (SD:12.64) (p=0.013). The incidence of psychotic disorders in our catchment area is 16,9 per 100.000 person years. It was higher in men 21,9 per 100.000 than women 12,2 per 100.000.

Discussion: Our study is the first epidemiological study in Sicily investigating the incidence of psychotic disorders. In our population men have a higher incidence of psychotic disorders than women and an earlier age of onset.

Poster #89**EMERGENCY CAESAREAN SECTION AS A RISK FACTOR FOR SCHIZOPHRENIA**

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Background: Schizophrenia is a highly heritable disorder with 20-30% of causation estimated to be environmental. Among these non-genetic causes, Obstetric Complications (OCs) are prime candidates (Cannon et al., 2002). In particular has been reported an increased incidence of emergency Caesarean section (C-section) in schizophrenic patients (Cannon et al., 2002). Animal studies also showed that C-section birth produce long-term over activity in mesolimbic dopamine systems, best known for his role in the pathophysiology of psychosis (El-Khodor and Boksa, 1998; Vaillancourt and Boksa, 2000). My aim is to look whether OCs in general and C-section in particular increase the risk for psychosis.

Methods: We collected socio-demographic data (age, gender, self-rated ethnicity) on 206 psychotic patients and 160 controls. Prenatal and perinatal information has been retrospectively collected from mothers using a standard questionnaire developed from other published reports (Lewis et al., 1989; McCreddie et al., 1992; McNeil et al., 1995; Cannon et al., 2002). The Lewis-Murray Scale has been used as the principal measure of OCs (Lewis et al., 1987). It consists of 17 individual items and each participants have been evaluated as having had a "definite" OCs if they had suffered at least one significant complication (score 1), or "absent" if they had not (score 0) (Lewis et al., 1989). Logistic regression was used to analyse the

relationships between OCs in general and C-section in particular and case-control status. Associations are expressed as odds ratios.

Results: Having suffered a "definite" OCs early in life increases the risk of psychosis of about 2 fold (OR= 1.826; CI 1.16 - 2.88; p=0.01). Regarding complication during delivery C-section seems to increase the risk of becoming psychotic of 3 fold when compared to vaginal delivery (OR= 3.07; CI 0.99 - 9.49; p=0.05). Moreover the risk tend to increase up to 7.26 when the C-section has been done in emergency (CI 0.91-57.94; p=0.61).

Discussion: As we expected from the literature OCs increases the risk of psychosis. In particular C-section delivery might contribute to the expression of psychotic symptoms possibly because its hypoxic effect in the brain.

Poster #90**MIGRATION, ETHNICITY AND PSYCHOSIS: EVIDENCE FOR A SOCIO-DEVELOPMENTAL PATHWAY**

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Background: Many studies have shown that rates of psychosis are elevated in the Black Caribbean population in the UK. We have previously reported findings from the ÆSOP study that suggest that indicators of childhood (i.e., long-term separation from a parent) and adult (i.e., poor education, current disadvantage) adversity, which are associated with onset of psychosis, are more common in the Black Caribbean population and may, thereby, contribute to the elevated rates of psychosis in this population. A recent, integrated model of psychosis has proposed a socio-developmental pathway to psychosis. In this model, adverse social experiences in childhood create an enduring liability to psychosis that becomes manifest in the event of further cumulative stressors in adulthood. We sought to extend previous ÆSOP analyses by investigating the extent to which a pathway from indicators of childhood adversity through indicators of adult adversity to psychosis holds: a) across ethnic groups; and b) independent of markers of biological risk.

Methods: ÆSOP is a multi-centre incidence and case-control study of first-episode psychosis. Cases were all individuals presenting to psychiatric services with a first episode of psychosis in defined catchment areas in London and Nottingham (UK). Controls were a group of population-based volunteers recruited from the same areas. We collected data on clinical presentation and indicators of childhood (i.e., separation from, and death of, a parent before the age of 16) and adult (i.e., education, indicators of current social disadvantage and isolation) adversity from 390 cases and 391 controls. Multiple mediation analysis was performed to test whether the indirect effects of parental separation through poor education and/or current disadvantage on case-control status: a) varied by ethnicity; and b) held after adjustment for pre-morbid IQ and neurological soft signs.

Results: There was a significant specific indirect effect of parental separation through current disadvantage on case-control status ($\beta=0.17$, 95% CI 0.07 to 0.26, $P=0.001$). Further, we found a significant indirect effect of parental separation through poor education and current disadvantage on psychosis ($\beta=0.06$, 95% CI 0.03 to 0.11, $P=0.004$). However, the indirect effect through poor education only was non-significant ($P=0.087$). When we adjusted findings for pre-morbid IQ and neuropsychological soft signs in a smaller sample, the strength of total indirect effects of parental separation remained broadly similar ($\beta=0.15$, 95% CI 0.01 to 0.30, $P=0.045$ and $\beta=0.16$, 95% CI -0.03 to 0.33, $P=0.071$, respectively). When inspecting the indirect effects of parental death, there was, again, a significant indirect effect through current disadvantage ($\beta=0.30$, 95% CI 0.13 to 0.46, $P=0.001$). However, there was no evidence that the effects of parental death on psychosis were mediated through poor education ($\beta=-0.01$, 95% CI -0.13 to 0.05, $P=0.820$). Total and specific indirect effects of parental separation did not significantly vary by ethnic group when comparing White British to Black Caribbean ($\Delta\chi^2=4.99$, $P=0.661$) subjects.

Discussion: Our findings suggest that the effects of adverse social experiences in childhood on psychosis are mediated through experiences of adult adversity in both White British and Black Caribbean subjects. Therefore,