

Synopsis for EU-GEI Publication

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Preliminary title: CANNABIS USE AND SOCIAL COGNITION IN PATIENTS WITH FIRST EPISODE OF PSYCHOSIS AND THEIR SIBLINGS
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Work Packages involved: WP2
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<p>Background</p> <ul style="list-style-type: none">• There is evidence that cannabis use might be relevant to the aetiology of psychosis (1, 2). Cannabis use has been associated with cognitive impairment in patients with psychosis and their siblings (3, 4) but results are controversial. Some studies report a better or similar neuropsychological functioning in patients with schizophrenia and with first episode of psychosis with a history of cannabis use compared with non users (5, 6). It has been also found in unaffected siblings of patients with schizophrenia, how the psychotomimetic effect of cannabis is increased compared with healthy subject suggesting a familial liability to psychosis associated with sensitivity to cannabis (4, 7).• Aberrant salience is the unusual or incorrect assignment of salience, significance, or affective meaning to neutral stimuli, which could favor the development of cognitive styles characterized by the presence of attentional biases towards threat stimuli, wrong interpretation of others' intentions and of irrelevant stimuli and altered cognitive schemas, and lead to the perception that the environment is dangerous and to the development of paranoid ideation.(8, 9) This tendency, has been associated with familial vulnerability for psychosis (10) and has been more likely found in delusional schizophrenia patients (11, 12) (13). Furthermore, deficits in social cognition processes have been related with schizophrenia and psychotic disorders such as the deficit in facial affect recognition (failure to accurately

Synopsis for EU-GEI Publication

perceive the affective expressions of others) or the jumping to conclusion reasoning bias (under conditions of uncertainty, people with delusions use less information to arrive at a decision, (14) both response patterns have been seen in multiple studies with deluded patients(15-21). However, there is a lack of studies about these cognitive processes in patients with a first episode of psychosis (FEP) and their relatives, which could clarify the role of these deficits in psychosis vulnerability or psychosis proneness. Some studies show a tendency of worse social cognition functioning in relatives of schizophrenia patients (10, 22-24).

- The relationship between the use of cannabis and these deficits in social cognition in psychotic patients and their siblings and its role in familial liability to psychosis is still unclear. A recent study reports that lifetime cannabis use was associated with better performance in affect recognition and face identity recognition in patients with non affective psychosis and this association apply to unaffected siblings and controls (25).

Hypothesis

- FEP patients (regardless their history of cannabis use) would be more likely to present with deficits in social cognition (i.e. assign affective meaning to neutral stimuli, deficits in facial affect recognition and a jumping to conclusion reasoning style) than their siblings.
- Siblings of FEP patients (regardless their history of cannabis use) would be more likely to present with deficits in social cognition (i.e. assign affective meaning to neutral stimuli, deficits in facial affect recognition and a jumping to conclusion reasoning style) than healthy subjects.
- Siblings of FEP patients who use cannabis would be more likely to present less deficits in social cognition (i.e. assign affective meaning to neutral stimuli, deficits in facial affect recognition and a jumping to conclusion reasoning style) than healthy subjects. FEP patients who use cannabis, 1) would tend to assign less affective meaning to neutral stimuli, 2) would perform better in facial affect recognition, 3) would present less tendency to a jumping to conclusion reasoning style, than patients who do not use cannabis.

Objectives

- To examine the relationship between cannabis use, affective assignments, facial affect recognition pattern and jumping to conclusion reasoning style in FEP patients and their siblings.

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Synopsis for EU-GEI Publication

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Synopsis for EU-GEI Publication

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Synopsis for EU-GEI Publication

Data needed for the study: <ul style="list-style-type: none">• Combined Social Assessments.• The Community Assessment of Psychotic Experiences (CAPE).• Opcrit,• FIGS: Family Interview for Genetic Studies• PAS: Premorbid Adjustment Scale (shortened version)• Cannabis Questionnaire (+ alcohol and drugs)• GAF: Global Assessment of Function• Medication list/ medication list past• IQ• White Noise Task, Degraded facial affect recognition, Beads task
Plan for statistical analysis (overall strategy): We will compare the face affect recognition, the tendency to assign affective meaning to neutral stimuli and a jumping to conclusion reasoning style of patients with schizophrenia, their siblings and healthy controls doing subgroups depending on the use of cannabis. Statistical analyses would be performed using multivariate ANCOVA.
Other analyses/methods: none
Involvement of external Parties (non EU-GEI): none
IPR check:
Timeframe:
Additional comments: