

Abstract

Background: A history of childhood adversity is associated with psychotic disorder, and there is evidence suggesting that some traumas may interact with polygenic risk scores for schizophrenia (SZ-PRS) synergistically to contribute to the risk of a psychotic disorder¹. However, nothing is known on how this interplay between genetic liability and traumatic exposure impact on the psychopathological and functional outcome of people with a first episode of psychosis (FEP).

Methods. We will combine 12, 24 and 26 month follow up longitudinal data of FEP patients treated in two different early intervention centres: (Treatment and Early Intervention in Psychosis Program (TIPP), in Lausanne Switzerland and Programa Asistencial a las Fases Iniciales de Psicosis (PAFIL)), in Santander Spain. This consortium includes 432 cases with a FEP (TIPP N: 208; PAFIL N: 224) followed prospectively. Childhood trauma will be assessed via electronic record and specifically designed questionnaires allowing to examine a general measure of polyvictimisation, abuse and neglect experiences. PRS-SZ has been calculated based on the last Psychiatry genomic Consortium and other PRS such as major depression and bipolar disorder will be calculated. Various psychopathological (positive negative and symptoms of psychosis and depressive symptomatology) as well as functional outcomes will be examined in relation to the interplay between trauma and genetic liability testing interaction effects using additive and or multiplicative interactions models, as well as gene-environment correlations.

This study will be the largest and only to date exploring the interplay between traumatic events and genetic liability in a well phenotyped sample of FEP followed-up to 3 years from the psychosis onset.

1. Aas M, Alameda L, Di Forti M, Quattrone D, Dazzan P, Trotta A *et al*. Synergistic effects of childhood adversity and polygenic risk in first-episode psychosis: the EU-GEI study. *Psychological Medicine* 2021: 1-9.