



Application number/Title: 43234 - Environmental and clinical correlates of medical comorbidities in severe mental illness

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Keywords provided by the Applicant PI to describe the research project:
bipolar, comorbidities, depression, imaging, nutrition, physical activity

Application Lay Summary:

The aim of this project is to verify if medical comorbidities are associated with increased mortality in patients with severe mental illness, and what are the environmental, and clinical factors associated with medical diseases in patients with severe mental illness. In addition, we will test the hypothesis of two different groups of patients with severe mental illness, one with higher comorbidity, specific associated environmental features and worse clinical profile.

We plan on undertaking this research to understand what factors are associated with increased risk of medical comorbidity. Identifying clinical correlates of medical comorbidities may suggest that effects of promoting physical health in psychiatric patients should also be tested as regards psychiatric symptoms, such as cognitive symptoms. Or viceversa. Finally, identifying two separate phenotypes in patients with severe mental illness, may also suggest that effectiveness and safety of commonly prescribed medications should be assessed separately in these two groups, according to the principles of precision psychiatry.

The project will last 36 months.

The public health impact will be in providing the clinicians to individuate those subjects with severe mental illness at increased risk of medical comorbidities, prevent such comorbidities, anticipate their treatment, and ultimately improving quality of life and life expectancy of patients with severe mental illness. As a consequence the advantages for public health system will be those related to early diagnosis and early treatment of medical conditions, namely a better outcome, and decreased costs related to health-care utilization, including hospitalizations, and polypharmacotherapy that is generally prescribed in more severe cases across different medical diseases. Also, individuating two phenotypes of patients with severe mental illness will provide a rationale to further investigate efficacy and safety of psychopharmacologic agents separately in the two groups, in line with principles of personalized medicine and precision psychiatry, which may ultimately lead to better outcome and reduced costs in the long term.