

Centre of Excellence in Youth Mental Health; ⁹Ludwig Maximilian University

Background: Psychotic disorders are associated with serious deterioration in functioning even before the first psychotic episode. Also on clinical high risk (CHR) states of developing a first psychotic episode, several studies reported a decreased global functioning. In a considerable proportion of CHR individuals, functional deterioration remains even after (transient) remission of symptomatic risk indicators. Furthermore, deficits in functioning cause immense costs for the health care system and are often more debilitating for individuals than other symptoms. However in the past, CHR research has mostly focused on clinical outcomes like transition and therefore, functioning in CHR patients is under-investigated. The current study aims at predicting functioning at a single subject level applying multi pattern recognition to clinical data for the first time.

Methods: PRONIA ('Personalized Prognostic Tools for Early Psychosis Management') is a prospective collaboration project funded by the European Union under the 7th Framework Programme (grant agreement n° 602152). Considering a broad set of variables (sMRI, rsMRI, DTI, psychopathological, life event related and sociobiographic data, neurocognition, genomics and other blood derived parameters) as well as advanced statistical methods, PRONIA aims at developing an innovative multivariate prognostic tool enabling an individualized prediction of illness trajectories and outcome. Seven university centers in five European countries and in Australia (Munich, Basel, Birmingham, Cologne, Melbourne, Milan/Udine, Turku) participate in the evaluation of three clinical groups (subjects clinically at high risk of developing a psychosis [CHR], patients with a recent onset psychosis [ROP] and patients with a recent onset depression [ROD]) as well as healthy controls.

In the current study, we analysed data of 114 CHR patients. Functioning was measured by the 'Global Functioning: Social and Role' Scales (GF S/R). Features were derived from the large pool of clinical data that were assessed in PRONIA including questionnaires measuring CHR criteria as well as psychopathology, family history of psychotic disorders or treatment and various self-rating scales. Feature Elimination method of a strict Wrapper was used to identify most predictive variables from the multitude of clinical data included into the analysis.

Results: Balanced Accuracy of predicting social functioning in CHR patients was acceptable (pooled cross-validation: BAC = 74.3%, Sens = 72.8%, Spec = 60.3%; leave-site-out cross-validation: BAC = 69.9%, Sens = 84.3%, Spec = 55.6%). In contrast, applying the strict wrapper model revealed worse prediction performance for role functioning. Which might indicate that predicting level of role functioning requires more information than social functioning. As expected, prior functioning levels were identified as main predictive factor but also distinct protective and risk factors were selected into the prediction models.

Discussion: Identifying single predictive variables is in purpose of a much more efficient prognostic process. Moreover, understanding the mechanisms underlying functional decline and its illness related pattern might enable an improved definition of targets for intervention. Future research should aim at further maximisation of prediction accuracy and cross-centre generalisation capacity. In addition, other functioning outcomes as well as clinical outcomes need to be focused on.

T240. CAREGIVER BURDEN OF OUTPATIENTS WITH SCHIZOPHRENIA IN UNIVERSITY CLINIC IN SAO PAULO, BRAZIL

Elaine Di Sarno*¹, Isabel Cristina Napolitano¹, Mario Rodrigues Louzã Neto¹

¹Institute of Psychiatric, Hospital Clinics, IPQ-HC-FMUSP

Background: The impact of schizophrenia on the family is complex and affects not only the patient, but his/her whole family. The adverse

consequences involve physical, emotional, social, and economic restrictions and imply an objective and subjective burden for caregivers.²

This study aims to evaluate the burden of caregiving in a sample of outpatients with schizophrenia, in Sao Paulo, Brazil.

Methods: Cross-sectional observational study. Patients with diagnosis of schizophrenia (DSM-5), 18–50 years, both sexes, and a relative/caregiver, both sexes, aged 18 to 70 years, living in contact with the patient at least 20 hours/week. Measures included patients and caregivers' demographic variables. Family burden was evaluated using the Brazilian version of the Family Burden Interview Schedule (FBIS-BR), a semi-structured interview, considering objective and/or subjective burden, distributed in five subscales (assistance to the patient in daily life [objective and subjective burden]; supervision of patients' problematic behaviors [objective and subjective burden]; financial burden; impact on family routine [objective and subjective]; worries about the patients' present and future life [subjective]). The questions of FBIS-BR refer to the last thirty days prior to the interview, except for one item, which evaluates the overload during the last year. The objective burden is assessed in a Likert scale (1 = never to 5 = every day), and subjective burden, in Likert scale (1 = not at all to 4 = very much).

Results: Patients: n= 56: 69.6% male; mean age: 36.04 ± 9.62 years; 89.3% single; duration of disease: 15.07 ± 9.83 years; number of hospitalizations: 2.95 ± 3.76; 76.8% with elementary or middle school; 66.1% without social security.

Caregivers n=56: 76.8% female; mean age: 56.30 ± 11.46 years; 57.1% mothers; 10.7 % fathers; 23.2% siblings; 57.1% married; 62.5% with elementary or middle school; in contact with the patient 81.71 ± 37.04 hours/week, most of them live with the patient; 53.6% without social security.

The mean total score of the objective and subjective burden was 2.43 ± 0.57 and 2.14 ± 0.53, respectively.

In the analysis of subscales the assistance to the patient in daily life (objective) was 3.26 ± 0.71 and it subjective aspect was 1.82 ± 0.89; supervision of patients' problematic behaviors (objective) was 1.80 ± 0.53 and it subjective aspect was 0.95 ± 0.71. The impact on family routine (objective and subjective) was 2.21 ± 0.93 and worries about the patients' present and future life (subjective) 3.64 ± 0.61; financial burden: 3.39 ± 1.54. The mean total family income was US\$1008.49 ± \$526.02.

There were no significant differences in FBIS-BR scores between male and female patients, except for "supervision of patients' problematic behaviors", both objective (p=.013, uncorrected for multiple comparisons) and subjective (p= .032, uncorrected for multiple comparisons) aspects, in which female patients were responsible for a higher burden for their caregivers. Regarding the family's perception of the financial burden in the last year, 57.3% considered their spending on patients as frequent, almost always or always heavy, in the same period.

Discussion: Our results are consistent with the study of Barroso et al. (2007), according to which providing care to psychiatric patients generates the feeling of overload, since the caregiver undergoes changes in his / her routine of life, failing to satisfy his / her needs to meet the needs of the patient. The burden affects almost equally male and female patients.

References:

1. Caqueo-Urizar A.,Castillo M., Giráldez S. et al.. *Psicothema* 2014; 26(2): 235–243
2. Barroso et al. *Rev. Psiq. Clín* 34 (6); 270–277

T241. INTERPERSONAL COGNITIVE RIGIDITY AFFECTS SOCIAL FUNCTIONING IN PSYCHOSIS MORE THAN THEORY OF MIND: A STUDY WITH THE REPERTORY GRID TECHNIQUE

Helena García-Mieres*¹, Susana Ochoa², Victoria Furlan¹, Raquel Lopez Carrilero², Anna Villaplana², Regina Vila-Badia³, Eva Grasa⁴, Ana Barajas⁵, Esther Pousa⁶, Guillem Feixas¹

¹Universitat de Barcelona; ²Parc Sanitari Sant Joan de Déu;

³Fundació Sant Joan de Déu; ⁴IIB-Hospital Santa Creu I Sant Pau;

⁵Centre de Salut Mental Les Corts; ⁶Hospital del Mar