

Background: High-risk symptoms for psychosis (HRS) and substantial functional impairment occurs early in the course of psychosis (Fusar-Poli et al., 2015). Many patients with HRS are adolescents who are still living at home and are highly reliant on their relatives for support. Objectives: (1) To compare the family burden of caregivers of adolescents with HRS with carers of an age and gender matched healthy control group (HC), (2) to examine the relationships between different family burden aspects and high-risk symptoms for psychosis in the HRS sample.

Methods: Sample: 68 HRS subjects (15.3 ± 1.7 years, 66% females) and 42 HC subjects (15.5 ± 1.5 years, 66% females) from a prospective longitudinal study including help-seeking subjects who met HRS criteria (Child and Adolescent Psychiatry and Psychology departments of Hospital Clínic and Sant Joan de Déu, Barcelona, Spain). Inclusion criteria: age 10–17 years, meeting criteria for 1) attenuated positive or negative symptoms in the previous 12-months, 2) brief intermittent psychotic symptoms, 3) first or second degree relative with schizophrenia or schizotypal disorder plus impairment of functioning. Exclusion criteria: IQ<70, having a diagnosis of ASD. For HC subjects, exclusion criteria were having 1st or 2nd degree familiar with a psychotic disorder; a diagnosis of ASD and/or IQ<70. Instruments: the Semistructured Interview for Prodromal Syndromes and Scale of Prodromal Symptoms (SIPS/SOPS), the Hamilton Depression Scale and the Young Mania Scale for affective symptoms, a cognitive battery and the Caregiver Burden Inventory (CBI) which is a measure of family burden that has been validated in first-episode patients (McCleery et al., 2007). Caregivers' responses are rated on a Likert scale from 0 (not at all descriptive) to 4 (very descriptive) and distributed in 5 factors: Time-Dependence Burden (T-Db), Developmental Burden (Db), Physical Burden (Pb), Social Burden (Sb), and Emotional Burden (Eb). High scores indicate greater perceived burden.

Results: HRS and HC subjects did not significantly differ in age ($t=0.68$, $p=0.497$) and sex ($X^2=0.003$, $p=0.958$). Intellectual quotient was higher in HC (mean= 105.4 ± 11.28) than in HRS subjects (98.63 ± 14.27 , $t=2.53$, $p=0.013$). Mean scores of high-risk symptoms in HRS subjects were higher than in HC subjects ($t>9.35$, $p<0.001$): positive: 9.12 ± 4.76 , negative: 11.16 ± 5.49 , disorganization: 4.96 ± 3.03 , general: 8.22 ± 3.83 , and total symptoms: 33.24 ± 12.59 . HRS subjects had also higher scores in depressive (10.54 ± 7.54 , $t=-9.75$, $p<0.001$) and manic symptoms (3.61 ± 4.53 , $t=-5.10$, $p<0.001$). Caregivers of HRS subjects showed higher scores than caregivers of HC in all CBI subscales ($t>5.59$, $p<0.001$; T-Db: 6.36 ± 5.01 vs 1.02 ± 1.60 , Db: 7.42 ± 6.51 vs 0.45 ± 1.23 , Pb: 7.00 ± 6.13 vs 0.58 ± 1.80 , Sb: 4.77 ± 4.66 vs 0.64 ± 1.95 , Eb: 4.86 ± 4.64 vs 0.93 ± 2.66). Time-Dependence burden reported by caregivers of HRS patients was significantly correlated with the SOPS total score ($r=0.303$, $p=0.014$) and with the negative SOPS subscale score ($r=0.308$, $p=0.012$). The relationship between negative SOPS symptoms and time-dependence burden remained after controlling for affective symptoms ($F=5.07$, $p0.028$) and intelligence quotient ($F=7.27$, $p=0.009$). This factor represents objective aspects of burden arising from demands on the caregiver's time.

Discussion: Caregivers of adolescents meeting criteria for HRS showed high perceived burden compared with caregivers of healthy adolescents. Time-dependence burden reported by caregivers was related to negative prodromal symptoms of HRS subjects. These findings highlighted that family burden occurs early in the course of psychosis. Acknowledgments: ISC-III/FIS, FEDER.

F30. SMARTPHONE APPLICATION "ROBIN": FEASIBILITY, ENGAGEMENT AND SATISFACTION OF A SMARTPHONE APPLICATION APPROACH TO SUPPORT TREATMENT OF (ATTENUATED) PSYCHOTIC SYMPTOMS IN ADOLESCENTS

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Background: There is increasing interest in using mobile technologies such as smartphones application in mental health care. First research results from the use of smartphone applications in the treatment of psychotic disorders are promising. Current analysis showed, that especially young people would be interested in smartphone applications within treatment settings. However, there is a lack of investigations in this population. There is also little known about mobile technologies in the work with attenuated psychotic symptoms. To address these gaps, we developed "Robin", a specific smartphone application to support the therapy of adolescents with attenuated or full-blown psychotic symptoms. The smartphone application targets medication adherence, real-time symptom assessment and provides help coping with symptoms and stressful situations in daily life.

Methods: Based on existing literature and our clinical expertise within a specialized outpatient care for adolescents with (attenuated) psychotic symptoms, a first modular version of the app was developed and adapted after first pilot investigations with patients (N=7, Age 14–18) and therapists (N=10). Participants of the pilot investigation completed a questionnaire regarding usability and acceptance of the application. Furthermore, we investigated how the patients used the application in their daily life by analyzing the user data from the application. In September 2017, the development of the smartphone application has been finalized and we have started with a systematic clinical evaluation study for testing the efficiency of the app. The application is only used in combination with psychotherapy in our university hospital for child and adolescent psychiatry.

Results: The data from our pilot investigation showed, that "Robin" was accepted by clinicians and patients. All clinicians said they would like to use the application to enrich their therapeutic approaches. All patients in the pilot project used the application in their daily life. Especially modules with information about symptoms and coping strategies were frequently used. Since September 2017, first patients have been included to the systematic evaluation study. In Florence 2018, we will present first data from this study about feasibility, engagement and subjectively perceived benefit of the smartphone application.

Discussion: The first feedbacks from the pilot investigation were encouraging. The findings were used to improve and adapt the application. Since September 2017, the application is used in psychotherapy and an evaluation study has started. This is one of the first clinical trials to test the efficacy of a specific application developed for adolescents with psychotic and with attenuated psychotic symptoms.

F31. POLYGENIC RISK SCORES AND EARLY RISK ENDOPHENOTYPES IN CHILDREN AT GENETIC RISK OF SCHIZOPHRENIA AND BIPOLAR DISORDER: IMPLICATIONS FOR THE DEFINITION OF THE CHILDHOOD RISK STATUS

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Background: Polygenic risk scores (PRS) of schizophrenia (SZ) or bipolar disorder (BD) are derived from genomewide association studies discriminating unrelated patients from controls. We have recently shown that both the SZ PRS and the BD PRS also distinguished affected patients from their non-affected adult relatives in a familial sample.¹ Furthermore, the association of the SZ PRS with BD subjects and, reciprocally, of the BD PRS with SZ subjects support the shared susceptibility for these diseases.¹ Importantly, new studies suggest that PRS would also distinguish the offspring at genetic risk from controls² and may be associated with psychotic-like experiences and negative symptoms in adolescents of the