Background: In the European Union approximately 5 million people suffer from psychotic disorders. Patients with schizophrenia make up the largest subgroup of these, and between 30-50% of them are considered resistant to treatment. Despite the proven potential of m-health solutions, there remains a lack of technological solutions in the treatment of patients with this disease. To improve the quality of care of these outpatients, an m-health solution termed Mobile Therapeutic Attention for Patients with Treatment Resistant Schizophrenia (m-RESIST) has been created in European Union and implemented in three countries (Spain, Hungary and Israel). m-RESIST is an innovative project aimed to empower patients with Treatment Resistant Schizophrenia, which integrates pharmacological and psychosocial approaches, develops knowledge of the illness using predictive models, and includes the following m-Health tools: a Dashboard, a Smartwatch and a Smartphone. Prior to the implementation in the healthcare reality, the solution has been tested in pilot groups to assess the acceptability, usability and satisfaction of all m-RESIST components in each country. In addition to online and onsite visits, this phase has included an anonymous online questionnaire, with the aim of capturing more consistently the opinion of participants in their experience with m-RESIST. We summarize their opinions about services and devices included in the solution, as well as the improvement proposals of each group.

Methods: During three months (from August to October), a case manager from Spain sent out an interval question to the Spanish participants via m-RESIST Dashboard, in order to collect information about the users experience with the system. It was administered weekly on different days and at different times, being anonymous for both parts. We have obtained qualitative information from nine patients, one caregiver and two clinicians.

Results: Patients consider m-RESIST a useful tool, in terms of immediacy of contact with clinicians, improvement of disease awareness, better follow-up of their disease, less-worries from caregivers and feeling protected by having a team with whom they can share their concerns. As cons, patients have a strong feeling of being observed and with too much repetitive questionnaires to answer. They consider a bit difficult to use the device, with several errors in its operation. They do not like to carrying the smartwatch and to check the battery of the devices. Also, the program is not available on weekends, which leads to a feeling of being somehow disregarded. For patients, this solution should also include the possibility of changing programmed location when on vacations and it should not be a substitute for traditional treatment. Regarding caregivers, m-RESIST is considered as a good tool to have in their daily lives, because it helps in terms of disease improvement, to have a better follow-up about pharmacological issues and symptoms, and to feel secure knowing there is a support for both patient and caregiver. No cons were reported. For clinicians, m-RESIST is a system with high potential, being easy, intuitive and useful, specially to share psychoeducational content with patients and to improve communication with them. However, several technological problems must be solved in the future, there still provide a poor patient monitoring and much more time is needed than regarding the traditional treatment.

Discussion: The three user groups consider m-RESIST as a useful tool, with pros and cons being described regarding their specific needs and provided proposals for improvement.

T238. THE ASSOCIATION OF PSYCHOSOCIAL FUNCTIONING WITH BRAIN VOLUME IN THE EARLY STAGES OF (PSYCHOTIC) ILLNESS

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T239. SINGLE-SUBJECT PREDICTION OF FUNCTIONAL OUTCOMES IN CLINICAL HIGH RISK SUBJECTS USING CLINICAL DATA

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Background: In recent years, psychosocial functioning has received a lot of attention with discussions around its importance in terms of early identification of illness, prediction of outcome, and targeting of treatment. Regardless of diagnostic outcome, both groups of individuals at ultra-high risk for psychosis (UHR) and those with a first episode of psychosis (FEP) show a wide range of functional outcomes. In light of these clinical outcomes, effort has been made to identify neuroanatomical markers for functioning and functional outcome independent of diagnostic status. The present study aimed to increase insight into the association between grey matter volume and different levels of social and occupational functioning (SOFAS) in healthy individuals, those with emerging mental health problems (EMH), UHR individuals, and those with a FEP.

Methods: Twenty nine healthy controls (12M:17F; mean age 20.97), 27 EMH individuals (6M:21F; mean age 21.24), 31 UHR individuals (14M:17F; mean age 24.40), and 31 FEP individuals (25M:6F; mean age 25.24) were recruited from mental health services, through posters, social media and opportunity sampling, in the wider area of Birmingham, UK. They underwent magnetic resonance imaging at the Birmingham University Imaging Centre and completed the Social and Occupational Functioning Assessment Scale (SOFAS: healthy controls mean 84.41, range 70-95; EMH mean 63.93, range 32-89; UHR mean 54.68, range 35-80; FEP SOFAS 56.65, range 21-95). Images were analysed using the CAT12 toolbox in SPM12. Grey matter volumes were examined controlling for age, gender and total intracranial volume.

Results: Compared to healthy controls, EMH individuals displayed a pattern of grey matter volume reduction in association with reduced functioning scores in medial prefrontal and cingulate areas. The areas spanning volumetric differences between the two groups in their association with SOFAS scores were similar to those identified in previous work investigating the association between brain volume and functional outcome in UHR individuals (Reniers et al., 2016, doi:10.1093/schbul/sbw086) but were more widespread and disperse. Similar areas of association were observed in UHR and FEP individuals compared to healthy controls but here the pattern was much more specific and more pronounced in the FEP group than the UHR group in the comparison with healthy controls.

Discussion: The present findings provide novel evidence that while those in the early stages of psychotic illness present a unified pattern of association between psychosocial functioning scores and grey matter volume, those with EMH present with a more pronounced but more dispersed pattern, possibly reflecting a more disperse diagnostic outcome. This indicates specificity with psychotic illness in the association between psychosocial functioning and brain volume and suggests importance concerning our ability to predict outcome and target interventions. In addition, it provides support for the recent focus on functioning in addition to distinct diagnostic categories.