European Psychiatry S43

functioning

functioning

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evidence has emerged that the changes do not only include absorption, distribution and excretion but also drug metabolism, such as modifications in the regulation of hepatic metabolism and conjugation. Oestradiol is known to have an important role in the expression of cytochrome P450 isoenzymes and glucuronosyltransferase that are involved in the metabolism of psychotropic drugs. Recent studies of different psychotropic drug classes have shown that this can result in profound changes of plasma concentrations that commence early in pregnancy and gradually increase towards delivery. In this presentation pregnancy-induced metabolic changes that have been found so far for several psychotropic drugs will be discussed and the question addressed whether and how we should monitor plasma levels in our pregnant patients.

**Disclosure:** No significant relationships.

**Keywords:** psychotropics; pregnancy; therapeutic drug monitoring

#### S0164

## Suicide attempts in women with severe mental illness in the perinatal period

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Suicide is one of the leading causes of perinatal maternal mortality (1). Maternal suicidality has a negative impact on the mother-baby relationship and child development. However, little is known about specific risk factors for perinatal suicide attempts in women with severe mental illness. In a sample of 1439 women with severe mental illness in the perinatal period and jointly admitted with their baby in a mother and baby unit, 154 (11.7%) attempted suicide, 49 in pregnancy (3.7%) and 105 (8.0%) in the post-partum period (2). Suicide attempt in pregnancy was related to alcohol use, smoking during pregnancy and a history of miscarriage, and in the post-partum period to major depressive episode or recurrent depression and younger age. Women who attempt suicide either in pregnancy or in the postnatal period could have different psychopathological and environmental profiles. Past obstetric history and addictive behaviours during pregnancy are essential elements to explore. In addition, depressive symptoms should be assessed in all women to treat major depression, as a means of preventing suicide attempt. Special attention to risk of suicide is needed during the perinatal period for women with severe mental illness. For women suffering from an acute psychiatric disorder, or a history of mental illness, multidisciplinary management should be implemented. 1. Oates M. Suicide: the leading cause of maternal death. Br J Psychiatry. 2003;183:279-81. 2. Gressier F et al. Risk factors for suicide attempt in pregnancy and the post-partum period in women with serious mental illnesses. J Psychiatr Res. 2017;84:284-291.

**Disclosure:** No significant relationships.

**Keywords:** Mental Illness; Suicide Attempt; pregnancy; post-partum

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Network analysis for personalisation of treatment:

Understanding links among symptoms, risk factors and

Recovery in schizophrenia: A network analysis of inter-

relationships among disease-related variables, personal

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resources, context-related factors and real-life

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**Abstract Body:** Central to recovery-oriented approaches in schizophrenia are treatment integration and personalization, targeting key variables beyond symptom reduction. The Italian network for research on psychoses conducted a study demonstrating, using network analysis, the central role of community activities in bridging the effects of symptoms, cognition, functional capacity and service engagement on real-word functioning. A 4-year follow-up study was recently completed and the presentation will illustrate the findings. Network analysis was used to test whether relationships among all variables at baseline were similar at follow-up. In addition, the network structure was compared between subjects classified as recovered or non-recovered at follow-up. Six hundred eighteen subjects were assessed at both baseline and 4-year follow-up. Results showed that the network structure was stable from baseline to follow-up, and the overall strength of the connections among variables did not significantly change. Functional capacity and everyday life skills were the most central variables in the network at both baseline and follow-up, while psychopathological variables were more peripheral. The network structure of non-recovered patients was similar to the one observed in the whole sample, but very different from that of recovered subjects, showing few connections among the different nodes. These data strongly suggest that connections among symptoms/dysfunctions tend to maintain over time, contributing to poor outcome in schizophrenia. Early treatment plans, targeting variables with high centrality, might prevent the emergence of self-reinforcing networks of symptoms and dysfunctions in people with schizophrenia.

**Disclosure:** Armida Mucci has been a consultant and/or advisor to or has received honoraria from Gedeon Richter Bulgaria, Janssen Pharmaceuticals, Lundbeck, Otsuka, Pfizer and Pierre Fabre. None of these has any impact on this abstract and on the presented study.

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#### S0170

## Symptom-specific assessment of treatment efficacy: The potential of network estimation techniques

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**Abstract Body: Introduction:** Most studies on the efficacy of psychiatric treatments consider overall scale scores as outcome measures. A focus on individual symptoms would, however, result in a more precise assessment of treatment efficacy and has potential in improving our understanding of the working mechanisms of treatment. Such an approach may also help in improving the identification of patients who are -based on their pretreatment symptomatology- the most likely to benefit from a particular treatment.

**Objectives:** To show the potential of network estimation techniques in a) unraveling the diverse symptom-specific responses to various depression treatments and b) improving the identification of patients who are the most likely to benefit from these treatments.

**Methods:** First, we combined patient-level data of multiple trials considering various depression treatments, such as antidepressant medication and (internet-based) cognitive-behavioral therapy. Network estimation techniques were used to determine the complex patterns in which symptom-specific responses to treatment were related.

**Results:** Individual clinical symptoms differed substantially in their responses to treatment and these symptom-specific responses were related in a complex manner. Patients suffering from symptoms that were directly affected by a particular treatment were -by definition- the most likely to benefit from that treatment.

**Conclusions:** Network estimation techniques were able to unravel the diverse symptom-specific responses to treatment and could help in improving our understanding of the chain of events leading to a clinical response. Information from the networks could also help in improving the identification of patients who were the most likely to benefit from a particular treatment.

Disclosure: No significant relationships.

Psychosocial imaging: Disentangling the interplay between environmental variables and psychotic disorders

### S0173

# Psychosocial adversity and the developing brain: Findings from the abcd study on 10,000 us children

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**Background:** Childhood exposure to social risk has the potential to disrupt brain development and increase vulnerability to adverse mental health outcomes. Here, we examine the effect of adversity on brain structure and psychopathology in the Adolescent Brain and Cognitive Development (ABCD) study, a US population-based sample of 10 year-olds.

Methods: Personal, caregiver, family and neighborhood characteristics were considered in 9299 unrelated children [age: mean (sd)=9.9 y (0.6); 53% males]. Hidden Markov Models were used identify clusters of participants based on their psychosocial exposure. The identified clusters were compared in terms of current psychopathology, lifetime psychiatric diagnosis, intelligence and brain structure. **Results:** ABCD participants clustered in to a "disadvantaged" group (N=4205) with multiple adverse exposures, and an "enriched" group (N= 5094) with limited exposure to adversity and multiple protective factors. Compared to the enriched group, the disadvantaged group had higher levels of all types of psychopathology and lifetime psychiatric diagnoses; lower scores on fluid and crystallized intelligence; smaller subcortical volumes; thinner sensorimotor cortices and thicker cortex in frontal regions; smaller surface area in temporal regions and larger surface area in the posterior cingulate cortices (all p<0.05 following Bonferroni correction for multiple testing).

**Conclusions:** Social adversity has significant and wide-ranging consequences for brain development and psychopathology, that shows little specificity for types of symptoms.

**Disclosure:** No significant relationships. **Keywords:** psychopathology; Neuroimaging

#### S0176

### The complexity of vulnerability to psychosis

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Schizophrenia is a complex mental disorder, which has been recently conceptualized as a neurodevelopmental disease. This conceptualization has changed the psychopathological approach to schizophrenia, which is now described as lying on a continuum from mild psychotic experiences to frank psychotic episodes. According to this theory, the presence of psychotic symptoms would represent the final pathway of a complex dysregulation and interaction of different genetic and environmental risk factors. As regards genetic liability, recent genome-wide association studies have identified a total of 108 loci containing common risk alleles, and which meet genome-wide significance. As regards environmental factors, higher rates of schizophrenia have been found in ethnic minority groups, in persons who are heavy cannabis smokers, in those who suffered from severe childhood traumas, in persons who have been reared in highly deprived settings. The identification of risk factors associated with vulnerability to psychosis is essential for improving our understanding and early detection of vulnerable individuals, and to propose tailored and timely interventions for sufferers. There is the need for an interdisciplinary approach to schizophrenia which includes