

Postnatal Depression Scale (EPDS). Women scoring  $\geq 12$  at the EPDS were considered screening positive.

**Results:** Twenty women (10%) were screening-positive. These women were more often foreigners ( $R^2=0,032$ ;  $\beta=0,178$ ;  $p=0,012$ ), single ( $R^2=0,026$ ;  $\beta=0,163$ ;  $p=0,022$ ), with a positive psychiatric family history ( $R^2=0,114$ ;  $\beta=-0,337$ ;  $p=0,001$ ) and more frequently affected by physical comorbidities unrelated to pregnancy ( $R^2=0,03$ ;  $\beta=0-0,174$ ;  $p=0,014$ ). These women also had more gestational comorbidities such as gestational hypertension ( $R^2=0,02$ ;  $\beta=-0,154$ ;  $p=0,030$ ), shortening of uterus neck ( $R^2=0,05$ ;  $\beta=-0,234$ ;  $p=0,001$ ), and miscarriage threats/placental abruption ( $R^2=0,004$ ;  $\beta=-0,067$ ;  $p=0,001$ ).

**Conclusions:** Our study highlighted the association between depressive symptoms and potentially dangerous gestational comorbidities. Our results further stress the need to screen all women in the peripartum for the presence of depression, in order to identify those at-risk and eventually put in place strategies to prevent further complications to mothers and children.

**Disclosure:** No significant relationships.

**Keywords:** EPDS; incidence and characteristic; postpartum depression; peripartum depression

## O0110

### Premenstrual syndrome as a possible presymptomatic marker for negative outcomes of pregnancy

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**Introduction:** Hungarian Family Planning Service's mission is decreasing the negative outcomes of pregnancy, including perinatal depression.

**Objectives:** Childbirth as a great irreversible life event is a normative crisis of the life, thus pregnancy and post-partum period are times of high risk for psychiatric symptoms. Stress in pre- and post-natal period has short and long-term effect on offspring. Women participating in family planning program should be evaluated for the high risk and specific preventive program are provided for them.

**Methods:** Between 2015-2018, 446 women were participating in family planning service. They were screened for premenstrual syndrome by using the shortened form of PAF questionnaire. We compared healthy and PMS affected patients' data in according to the prevalence of PPD, spontaneous abortion and period needed for conception.

**Results:** Prevalence of PMS in our sample was 51.4%. Overage duration between wished and realized conception was 6.1 months in healthy group vs 9.2 months in PMS group. Post-natal depression was screened by Edinburgh Post-natal Scale and it showed about 4-times higher prevalence between affected women by PMS. Surprising the rate of spontaneous abortion was 2-times higher, although the absolute number is rather low for statistical validation.

**Conclusions:** Women affected by PMS can be considered as high risk for perinatal mood disorders and negative outcomes of pregnancy. PMS can be useful as a presymptomatic marker of perinatal depression and may be increased risk for spontaneous abortion. Psychological aspect should be included into the periconceptual care. Family planning may be an optimal solution to prevent perinatal depression and its complication.

**Disclosure:** No significant relationships.

**Keywords:** premenstrual syndrome; prevention; post natal depression

## O0111

### Social support and prenatal mental health problems: a systematic review and meta-analysis

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**Introduction:** Pregnancy is a time of profound physical and emotional change as well as an increased risk of mental health problems. Providing social support is vital to reduce such risk.

**Objectives:** This systematic review and meta-analysis aimed at examining the relationship between social support and depression, anxiety and self-harm during pregnancy.

**Methods:** We searched observational studies from PubMed, Psych Info, MIDIRS, SCOPUS, and CINAHL databases. The Newcastle-Ottawa Scale tool was used for quality appraisal. The Q and the I<sup>2</sup> statistics were used to evaluate heterogeneity. A random-effects model was used to pool estimates. Publication bias was assessed using a funnel plot and Egger's regression test and adjusted using trim and Fill analysis. All the analysis was conducted using STATA.

**Results:** Sixty-seven studies with 64,449 pregnant women were part of the current review. Of the total 67 studies, 22 and 45 studies were included in the narrative analysis and meta-analysis, respectively. From the studies included in the narrative analysis, 20(91%) of them reported a significant association between social support and the risk of mental health problems (i.e. depression, anxiety, and self-harm). After adjusting for publication bias, the results of the random-effect model revealed low social support was significantly associated with antenatal depression (AOR: 1.18, 95% CI: 1.01, 1.41) and antenatal anxiety (AOR: 1.97, 95% CI: 1.34, 2.92).

**Conclusions:** Low social support was significantly associated with depression, anxiety, and self-harm during pregnancy. Policy-makers and those working on maternity care should consider the development of targeted social support programs to help reduce mental health problems amongst pregnant women.

**Disclosure:** No significant relationships.

**Keywords:** Depression; social support; Pregnancy; Anxiety

## Schizophrenia and other Psychotic Disorders 1

### O0112

#### Clinical and immunological profile of patients with schizophrenia

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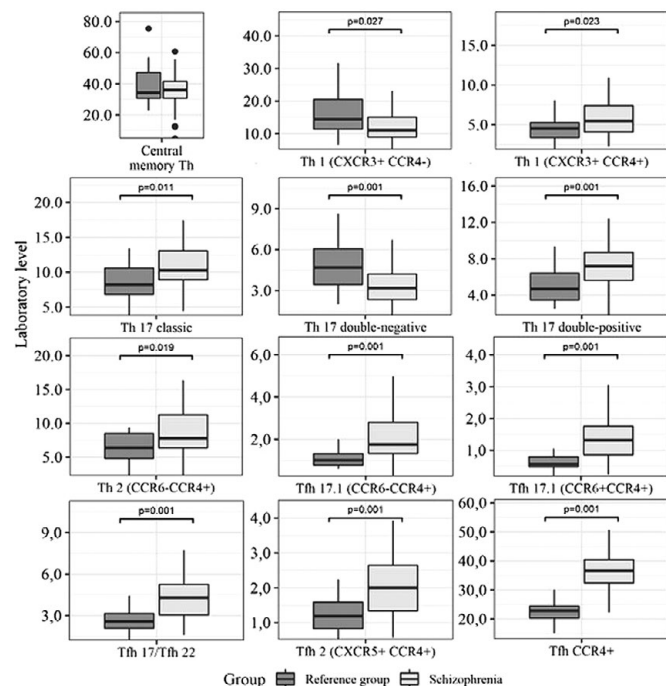
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**Introduction:** The question of the involvement of inflammatory and autoimmune processes in schizophrenia pathogenesis has become the most relevant in the last decade and yet is not fully understood.

**Objectives:** The study included 60 patients with paranoid schizophrenia (age 18 - 55 y.o.) and 30 healthy control group participants. Patients were in a stabilization state without a history of organic brain disorder or another verified somatic disease in the exacerbation phase.

**Methods:** Research methods included follow-up method, neuropsychological (PANSS, BAC-S), laboratory (enzyme immunoassay, flow cytometry), and statistical.

**Results:** Patients with schizophrenia had significant structural disorders of thinking, passive, apathetic withdrawal, negativism, impaired attention, psychomotor speed, volitional impulses. Cognitive impairment was detected in all study participants. Severe impairments are noted in the executive functioning, hand-eye coordination, attention, psychomotor speed. The severity of cognitive impairments correlated with the severity of clinical symptoms. Patients with schizophrenia had a significant decrease in central memory T-regulators levels, and an increase in Th1 and Th2 subsets, «double-positive» and «classic» Th17, Tfh2, «classic» Tfh17, and in Tfh17.1 (Pic.1).



Picture. 1. T-helper subsets in patients with schizophrenia. They also had high levels of CCL20, IL-10, IL-12, IL-1 $\beta$ , IL-27, IL-31, IL-4, IL-13, IL-6, IL-9, TNF $\alpha$  in comparison with a control group. A significantly decreased levels of IL-17A, IL-17F, IL-2, IL-22, and TNF $\beta$  were also described in this group of patients.

**Conclusions:** Patients with schizophrenia may be characterized by the presence of an inflammatory process and a high chance of autoimmunity. *Acknowledgement.* This work was supported by the grant of the Russian Federation Government, contract 14. W03.31.0009

**Disclosure:** No significant relationships.

**Keywords:** schizophrénia; Cytokines; autoimmunity; lymphocytes subsets

## O0113

### Elevated osteopontin and IFN $\gamma$ serum levels and increased neutrophil-to-lymphocyte ratio are associated with the severity of symptoms in schizophrenia

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**Introduction:** Inflammation and immune dysregulation could contribute to the pathogenesis of schizophrenia. Osteopontin (OPN) is a key cytokine-like molecule in cellular immune response and it can directly modulate the cytokine expression and survival of microglia. Furthermore, its mRNA expression is elevated in first episode psychosis. Imbalance of T-helper subtypes could also represent a vulnerability factor for schizophrenia.

**Objectives:** The aim of this study was to evaluate the relevance of T-helper subtype associated cytokines, OPN and NLR in the assessment of the severity of schizophrenia.

**Methods:** 22 patients with schizophrenia were assessed for the intensity of their symptoms by PANSS and CGI scores. Serum OPN, IFN $\gamma$ , IL-10 and IL-8 concentrations were measured by ELISA kits and NLR was calculated from blood count. Statistical evaluation was performed using Mann-Whitney U test, Student's t test and Spearman correlation.

**Results:** We found significant correlation between the level of OPN and PANSS-total, PANSS-general scores. IFN $\gamma$  level and NLR showed significant correlation with PANSS-total, PANSS-positive, PANSS-general and CGI score. Antipsychotic therapy only had significant effects on NLR and OPN levels, both of which were significantly reduced after long-term antipsychotic treatment.

**Conclusions:** Our results indicate that elevated OPN and IFN $\gamma$  concentrations, and increased NLR are associated with severe symptoms in schizophrenia and suggest the importance of Th1 subtype in patients with high PANSS-positive and PANSS-general score. Antipsychotic treatment had significant effects on the level of OPN and NLR, but not on the level of IFN $\gamma$ . Overall our results strengthen the inflammation hypothesis of schizophrenia.

**Disclosure:** No significant relationships.

**Keywords:** osteopontin; Cytokines; inflammation; schizophrénia