

compared maternal mental health stratifying on country/continents of residence, and identified determinants of mental health using multivariable regression models.

**Results:** Of 2,109 pregnant women recruited, 1,932 were from Canada, 48 the United States (US), 73 Europe, 35 Africa, and 21 Asia/Oceania. Mean depressive symptom scores were lower in Canada (EPDS 8.2, SD 5.2) compared to the US (EPDS 10.5, SD 4.8) and Europe (EPDS 10.4, SD 6.5) ( $p < 0.05$ ), regardless of being infected or not. Maternal anxiety, stress, decreased income and access to health care due to the pandemic were increasing maternal depression. The prevalence of severe anxiety was similar across country/continents. Maternal depression, stress, and earlier recruitment during the pandemic (June/July) were associated with increased maternal anxiety.

**Conclusions:** In this first international study on the impact of the COVID-19 pandemic, CONCEPTION has shown significant country/continent-specific variations in depressive symptoms during pregnancy, whereas severe anxiety was similar regardless of place of residence. Strategies are needed to reduce COVID-19's mental health burden in pregnancy.

**Disclosure:** No significant relationships.

**Keywords:** COVID-19 pandemic; maternal mental health during pregnancy; country/continent variations; Edinburgh Perinatal Depression Scale (EPDS)

## EPP0254

### Prevalence of eating disorders in adolescent girls in Siberia

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**Introduction:** Eating disorders (ED) are an urgent public health problem, however, many adolescents with clinical symptoms fail to meet stringent diagnostic criteria.

**Objectives:** To estimate the prevalence of eating disorders (ED) and subthreshold eating disorders (SED) in adolescent girls.

**Methods:** A cross-sectional study of girls attending secondary schools ( $n = 917$ ) was carried out. The sample comprised of 18.3% early adolescents (aged 12-13), 51% middle adolescents (aged 14-15), and 30.6% late adolescents (aged 16-17). We used the Body Image and Eating Distress scale (Koskelainen et al., 2001) coded on a 1-3 scale. The answers were scored on a scale of 1-3. Adolescents scoring 12 or above on four items measuring body dissatisfaction were considered as dissatisfied with their bodies and were further divided into two subgroups: girls scoring 10 or above on three items measuring eating distress were considered as having ED, whereas girls scoring less than 10 were considered as having SED.

**Results:** The prevalence of ED was 2.1% (CI 1.4-3.3), the prevalence of SED was 9.6% (CI 7.8-11.7). In early adolescence, the prevalence

of SED was 1.6% (CI 0.9-2.7). In middle adolescence, the prevalence of SED was 5.1% (CI 3.9-6.7), the prevalence of ED was 0.9% (CI 0.5-1.8). In late adolescence, the prevalence of SED was 2.8% (CI 1.9-4.1), the prevalence of ED was 1.2% (CI 0.7-2.1).

**Conclusions:** In adolescent girls, the SED are 4.6 times commoner than overt above-threshold ED. During adolescence, the prevalence of SED decreases, while the prevalence of ED increases with age.

**Disclosure:** The reported study was funded by grant RNF according to the research project № 21-15-00033

**Keywords:** Epidemiology; Adolescents; Eating Disorders; girls

## EPP0255

### No Consistent Evidence for Brain Volumetric Correlates of Resilience in Two Independent Cohort Studies

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**Introduction:** Childhood adversities have been associated with long-lasting brain morphological differences and poor psychological outcomes over the lifespan. Evidence with regard to protective factors counteracting the detrimental effect of childhood adversity on neurobiology is scarce.

**Objectives:** Therefore, we examined the interplay of childhood adversity with multiple protective factors in relation to brain morphology in a child and an adult cohort.

**Methods:** We analyzed data from two epidemiological longitudinal birth cohorts, the Generation R Study ( $N=3,008$ ) and the Mannheim Study of Children at Risk (MARS) ( $N=179$ ). Cumulative exposure to 12 adverse events (such as physical and sexual abuse), and the presence of protective factors, including child temperament, cognition, self-esteem, friendship quality and maternal sensitivity were assessed at different time points during childhood. Anatomical scans were acquired at the ages of 9-11 years in Generation R and at 25 years in MARS.

**Results:** Childhood adversity was related to smaller global brain volumes in Generation R, with similar effect sizes observed for the cerebellar volume in MARS. While small interaction effects between adversity and protective factors were found on the medial orbitofrontal cortex, the cerebellum and the amygdala in either cohort study, no interactions were consistent across cohorts or survived correction for multiple comparisons.

**Conclusions:** We found no consistent or strong evidence for interaction effects between multiple protective factors and childhood adversities on brain structure in a child and an adult cohort study. Instead, small interaction effects were found in either children or adults warranting further investigation and more fine-grained analyses.

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**Keywords:** Brain morphology; resilience; adversity; magnetic resonance imaging

## EPP0256

### Epigenetic mechanisms and stress coping in mood disorders

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**Introduction:** Experimental data from both clinical and preclinical studies have unequivocally shown positive correlations between stress and depression, stress, depression and epigenetic changes.

**Objectives:** The aim of this research is to analyze clinical trials on coping mechanisms and their interaction with epigenetic mechanisms in patients with mood disorders. Generally, we studied the interaction between these two mechanisms and its effects on the onset, recurrence and progression of these disorders.

**Methods:** 109 articles were analyzed, of which 37 were considered relevant. 72 studies were excluded based on titles and abstracts. Regarding the coping mechanisms, 10 longitudinal and cross-sectional studies were selected. Longitudinal studies are defined here by a follow-up period longer than 6 months.

**Results:** There is a consistent association in the literature between the degree of methylation of the NR3C1 gene, stress and affectivity disorders. The analyzed studies showed that methylation of the NR3C1 gene is associated with both stress and mood disorders. FKBP5 influences glucocorticoid receptor sensitivity and stress response. SLC6A4 gene methylation has been systematically associated with stress and affectivity disorders. Higher BDNF methylation has also been found in people who report high levels of stress at work. The data collected suggest that SKA2 methylation may serve as a biomarker for certain features of depression, such as suicidal ideation, and is not directly involved in the etiology of mood disorders.

**Conclusions:** The results suggest that environmental stress and adversity in early childhood may change biological systems through epigenetic mechanisms and have long-term consequences, increasing the risk for unfavorable prognosis of mood disorders.

**Disclosure:** No significant relationships.

**Keywords:** mood disorders; stress; coping; epigenetic

## EPP0257

### The association between social support and antenatal depressive and anxiety symptoms among Australian women

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**Introduction:** Antenatal depression and antenatal anxiety adversely affect several obstetric and foetal outcomes, and increase the rate of postnatal mental illness. Thus, to tackle these challenges the need for social support during pregnancy is vital.

**Objectives:** This study examined the association between domains of social support and antenatal depressive and anxiety symptoms among Australian women.

**Methods:** Our study used data obtained from the 1973–78 cohort of the Australian Longitudinal Study on Women’s Health (ALSWH), focusing upon women who reported being pregnant (n=493). Depression and anxiety were assessed using the Center for Epidemiological Studies Depression (CES-D-10) scale, and the 9-item Goldberg Anxiety and Depression scale (GADS) respectively. The 19 item-Medical Outcomes Study Social Support index (MOSS) was used to assess social support. A binary logistic regression model was used to examine the associations between domains of social support and antenatal depressive and anxiety symptoms.

**Results:** After adjusting for potential confounders, our study found that the odds of antenatal depressive symptoms was about four and threefold higher among pregnant women who reported low emotional/informational support (AOR=4.75; 95% CI: 1.45, 15.66; p=0.010) and low social support (overall support) (AOR: 3.26, 95%CI: 1.05, 10.10, p=0.040) respectively compared with their counterpart. In addition, the odds of antenatal anxiety symptoms was seven times higher among pregnant women who reported low affectionate support/positive social interaction (AOR=7.43; 95% CI: 1.75, 31.55; p=0.006).

**Conclusions:** Low emotional support and low affectionate support have a significant association with antenatal depressive and anxiety symptoms respectively. As such, targeted screening of expectant women for social support is essential.

**Disclosure:** No significant relationships.

**Keywords:** Pregnancy; social support; anxiety symptoms; depressive symptoms

## EPP0259

### The association between long term intake of ultra-processed foods and recurrence of depressive symptoms in the Whitehall II cohort

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**Introduction:** High amounts of Ultra-Processed Foods (UPF) characterized Western type diet and have recently been associated with adverse cardio-metabolic outcomes. The extent to which UPF intakes affect Depressive Symptoms (DepS) in non-Mediterranean countries remains uninvestigated.

**Objectives:** We aimed to study whether long-term intake of UPF over adult life 1) is associated with subsequent recurrence of DepS assessed over 13 years of follow-up and 2) contribute to explain the diet quality-DepS associations already established.