

**Results:** From January 1, 2021, to December 31, 2022, there were 686 psychiatry admissions at Centro Hospitalar Médio Tejo, of which 125 (18,2%) were involuntary. The admission rates were approximately 136.6 per 100,000 people annually, with 24.9 being involuntary admissions per 100,000 people annually. In our analysis of involuntary admissions, women had a lower rate of such admissions, making up 6.4%, while men had a higher rate at 11.8%. No other gender identity was mentioned. Schizophrenia-related disorders were the primary cause for involuntary admissions for both genders, with 67.9% for men and 50% for women. Mood disorders were the second most common reason for involuntary admission, accounting for around 40.9% of cases for women and a significantly lower 16% for men. Involuntarily hospitalized patients exhibited longer lengths of stay independently of the gender. Men hospitalized involuntarily tended to be younger, whereas for women, involuntary hospitalizations were associated with older ages.

**Conclusions:** In conclusion, our study reveals gender differences in psychiatric involuntary admissions, with more men being involuntarily admitted than women. Schizophrenia group disorders were the most common diagnoses among male and female involuntary patients. Furthermore, all hospitalized women exhibited a higher prevalence of mood disorders, a trend that was more pronounced among those admitted involuntarily. These gender trends match the overall patterns seen in the epidemiology of schizophrenia and mood disorders. Additionally, women with schizophrenia generally exhibit better social functioning than men, which may explain the lower needs of involuntary hospitalization.

**Disclosure of Interest:** None Declared

## EPP0518

### Association between social distancing and incident microvascular events among individuals with diabetes mellitus: a population-based cohort study

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**Introduction:** Social isolation and loneliness have been rising social determinants of cardiometabolic health.

**Objectives:** To investigate the associations of social isolation and loneliness with diabetic microvascular complications (DMC) among individuals with type 2 diabetes mellitus (T2DM) and assess the extent to which intermediate risk factors explained the associations.

**Methods:** Data for individuals with T2DM (n=24,297, 62.2% male; mean age=60.0 years) were taken from the UK Biobank. Social isolation and loneliness were assessed using self-reported questionnaires. DMC, mainly including diabetic kidney disease, diabetic retinopathy, and diabetic neuropathy, were identified by linking hospital records and death registries.

**Results:** In the multivariate-adjusted model, social isolation was associated with an increased risk for incidence of any DMC

(most vs. least: HR: 1.13; 95% CI: 1.05-1.22), especially diabetic kidney disease and neuropathy; loneliness was also associated with any DMC (yes vs. no: HR: 1.12; 95% CI: 1.02-1.23) and diabetic kidney disease. Social isolation and loneliness ranked similarly in relative strength for predicting DMC as other conventional risk factors, such as smoking, high blood pressure, and physical activity. The association between social isolation and DMC was mainly attributed to health behaviors, while the association between loneliness and DMC was primarily explained by health behaviors, psychological factors, and diabetes-related factors.

**Conclusions:** Social isolation and loneliness were independently associated with a higher risk for incident DMC among individuals with T2DM, which were largely explained by subsequent unhealthy lifestyles, psychosocial stress, and diabetes-related factors. These findings underscore social isolation and loneliness as novel modifiable risk factors for predicting DMC.

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## Women, Gender and Mental Health

### EPP0521

#### Prenatal psychological distress, access to mental health care and pathways between risk/protective factors and maternal postnatal depressive symptoms in the E.L.F.E. french birth cohort

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**Introduction:** Mental health of pregnant and post-partum women is sensitive to environmental factors. However, access to mental healthcare remains difficult, while little is known about protective factors nor about interactions between different exposures.

**Objectives:** To explore on a large sample of women from the general population (i) the environmental and pregnancy characteristics independently associated with prenatal psychological distress and access to mental health care during pregnancy (ii) pathways between maternal, infant and parenthood

vulnerabilities or risk/protective factors and postnatal depressive symptoms (PNDS) at 2 months post-partum (PP)

**Methods:** The data from the French ELFE birth cohort were used. Available information about prenatal psychological status, access to mental health care and vulnerabilities-risk/protective factors for PNDS were collected during the maternity ward stay and at 2 months PP. PNDS were evaluated with the Edinburgh Postnatal Depression Scale (EPDS) at 2 months. Maternal/pregnancy characteristics independently associated with prenatal psychological distress and access to mental health care were explored using multivariate analyses. Pathways between risk/protective factors and PNDS at 2 months were investigated through Structural Equation Modeling.

**Results:** Of the 15,143 mothers explored in the prenatal part of the study, 12.6% reported psychological distress (PPD), 25% had a prenatal consultation with a mental health specialist, 11% used psychotropic drugs of which 4% had no specialist follow-up. Decreased likelihood to consult a mental health specialist was found in young women, with intermediate educational level and born abroad. PPD was more frequent in women with very low economic status, alcohol/tobacco use, unplanned pregnancy, late pregnancy declaration, multiple and complicated pregnancy. In the postnatal part of the study (n=11,583) partner's perceived antenatal emotional support, consultation with a mental health specialist before pregnancy, financial difficulties, prenatal psychological distress and experience of pregnancy were directly associated with the severity of maternal PNDS at 2 months PP, as well as perceived postnatal support, infant's self-regulation skills, maternal ability to understand infant crying and infant hospitalisation.

**Conclusions:** Perinatal professional support should begin antenatally and target the couple's prenatal functioning, with particular attention to women presenting history of psychiatric disorders, especially when of low socioeconomic status. After delivery, addressing infant and parenthood characteristics is recommended.

**Disclosure of Interest:** None Declared

## EPP0523

### The biological modifications of milk are linked to mental health of mothers of infants affected by bronchiolitis

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**Introduction:** Breast milk is a dynamic type of nourishment that changes based on the needs of the child. An increasing amount of data suggests that mental health may be an important factor in such modulation. In addition, breast milk contains extracellular vesicles (EVs), which are currently considered an important dynamic system of communication between cells, even of different individuals.

**Objectives:** Purpose of this article is to investigate whether changes in breast milk in terms of EVs concentrations are related to maternal mental health.

**Methods:** This is a case-control study for which we enrolled mothers of infants with bronchiolitis (N=33) and mothers of healthy infants (N=13). Breast milk samples were taken and EVs concentrations were quantified. Maternal mental health was assessed by administration of five different psychometric scales: Edinburgh Postnatal Depression Scale (EPDS), State Trait Anxiety Inventory (STAI-S, STAI-T), Barkin Index of Maternal Functioning (BIMF), The Connor-Davidson Resilience Scale 10 items (CD-RISC). Subsequently, scale scores were related to EVs concentrations by negative binomial regressions adjusted for case-control.

**Results:** As maternal resilience increases, the EVs of neutrophilic origin (p=0.0447) and those of endothelial origin (p=0.0078) decrease<sup>1</sup>. In contrast, an increased EPDS score is associated with higher levels of B-lymphocyte EVs (p=0.0376). Scores on the STAI-S scale impact many more populations of EVs<sup>2</sup>: we observed an increased Incidence Rate Ratio (IRR) of neutrophil-derived EVs (p<0.0001), T-lymphocyte-derived EVs (p=0.0214), NK-cell-derived EVs (p=0.0202), T-reg CD4+ CD25+ (p=0.0141) and endothelial marked EVs (p=0.0180). An increase in STAI-T scale scores also was associated with a significant increase in CD177+ neutrophil-derived EVs (p=0.0028) and endothelial-derived EVs (p=0.0111)<sup>3</sup>.

**Image:**

| CD-RISC     |                            |             |               |
|-------------|----------------------------|-------------|---------------|
| FENOTIPO    | IRR (Incidence Rate Ratio) | 95% IC      | P-VALUE       |
| VESCICOLARE |                            |             |               |
| CD3+        | 0.950                      | 0.900 1.003 | 0.0628        |
| CD14+       | 1.022                      | 0.967 1.079 | 0.4427        |
| CD177+      | 0.933                      | 0.873 0.998 | <b>0.0447</b> |
| CD62E+      | 0.918                      | 0.863 0.978 | <b>0.0078</b> |
| CD4+        | 0.961                      | 0.908 1.016 | 0.1573        |
| CD4+ CD25+  | 0.953                      | 0.898 1.012 | 0.1141        |
| CD20+       | 0.951                      | 0.883 1.025 | 0.1911        |
| HERV+ HLAG+ | 0.955                      | 0.893 1.022 | 0.1825        |
| LPS+        | 0.979                      | 0.924 1.036 | 0.4624        |