

**Objectives:** An assessment of psychobiotic and anti-anxiety effects a probiotic supplement containing *Lactobacillus Plantarum* CECT7485 and *Lactobacillus Brevis* CECT7480 (PLANTARUM) in patients with anxiety undergoing treatment with selective serotonin reuptake inhibitors (SSRI) antidepressants.

**Methods:** Sixty patients with mixed anxiety and depressive disorder (according to ICD-10 diagnostic criteria F41.2) were included in an 8-week open label study. Thirty participants received either SSRI antidepressants with PLANTARUM at a dose of  $1.0 \times 10^9$  CFU once per day and thirty patients received SSRI antidepressants only. The severity of anxiety symptoms was assessed using Hamilton Anxiety Rating Scale (HAM-A) and General Anxiety Disorder Scale (GAD-7).

**Results:** After 8 weeks intervention, a significant reduction of HAM-A total score (from  $37,8 \pm 5,3$  to  $23,6 \pm 4,4$ ) was detected in patients with anxiety who prescribed SSRI antidepressants and PLANTARUM ( $p < 0,05$ ), compared with participants who didn't receive probiotics ( $p > 0,05$ ). Also, a significant reduction of GAD-7 total score (from  $21,7 \pm 3,3$  to  $12,5 \pm 2,4$ ) was detected in patients with anxiety symptoms who received SSRI antidepressants and PLANTARUM ( $p < 0,01$ ), compared with patients who didn't intake probiotics ( $p > 0,05$ ).

**Conclusions:** The present data illustrated that probiotic supplement PLANTARUM is a feasible for adjunctive to SSRI antidepressants intervention for anxiety treatment.

**Disclosure of Interest:** None Declared

## EPP0680

### Effects of probiotic supplement *Lactobacillus Plantarum* CECT7485 and *Lactobacillus Brevis* CECT7480 on sleep quality in patients with anxiety and depression comorbidity

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doi: 10.1192/j.eurpsy.2023.976

**Introduction:** Recent studies have supported that *Lactobacillus plantarum* can reduce the severity of anxiety and depression. However, previous studies did not focus on the sleep quality. This study determines whether *Lactobacillus Plantarum* CECT7485 and *Lactobacillus Brevis* CECT7480 reduce the severity of insomnia, and improves sleep quality in patients who comorbidity of depression and anxiety disorders.

**Objectives:** An assessment of insomniac effects a probiotic supplement containing *Lactobacillus Plantarum* CECT7485 and *Lactobacillus Brevis* CECT7480 (PLANTARUM) in patients with anxiety and depression comorbidity undergoing treatment with selective serotonin reuptake inhibitors (SSRI) antidepressants.

**Methods:** Sixty patients with mixed anxiety and depressive disorder (according to ICD-10 diagnostic criteria F41.2) were included in an 8-week open label study. Thirty participants received either SSRI antidepressants with PLANTARUM at a dose of  $1.0 \times 10^9$  CFU

once per day and thirty patients received SSRI antidepressants only. The severity of insomnia was assessed using Insomnia Severity Index (ISI). The severity of depressive symptoms was rated using Hamilton Depressive Rating Scale (HDRS). The severity of anxiety symptoms was assessed using Hamilton Anxiety Rating Scale (HAM-A) and General Anxiety Disorder Scale (GAD-7).

**Results:** After 8 weeks intervention, a significant reduction of ISI total score (from  $22,1 \pm 2,8$  to  $14,1 \pm 2,1$ ) was detected in patients with anxiety and depression who prescribed SSRI antidepressants and PLANTARUM ( $p < 0,05$ ), compared with participants who didn't receive probiotics ( $p > 0,05$ ). Also, we detected a significant improve sleep quality of insomniac patients with comorbidity of anxiety and depressive symptoms ( $p < 0,05$ ) who received SSRI antidepressants and probiotic supplement *Lactobacillus Plantarum* CECT7485/*Lactobacillus Brevis* CECT7480.

**Conclusions:** The present data illustrated that probiotic supplement *Lactobacillus Plantarum* CECT7485 and *Lactobacillus Brevis* CECT7480 is a feasible for adjunctive to SSRI antidepressants intervention for insomniac patients with anxiety and depressive comorbidity

**Disclosure of Interest:** None Declared

## COVID-19 and related topics 07

### EPP0681

#### The impact of severe mental illness (SMI) on the rate of COVID-19 vaccine uptake and hesitancy

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doi: 10.1192/j.eurpsy.2023.977

**Introduction:** The COVID-19 pandemic has disproportionately affected patients with severe mental illness (SMI), a vulnerable population with high morbidity and mortality. A UK-based study found reduced vaccination rates in patients with SMI; they therefore need to be prioritised for prevention and disease management.

**Objectives:** The objectives were to determine risk factors for vaccine hesitancy, and how best to manage those in patients with SMI, as well as whether our intervention of calling patients for their vaccines had a positive outcome.

**Methods:** Following approval from the Lambeth Directorate of South London and Maudsley (SLaM) NHS Foundation Trust, we investigated COVID-19 vaccination rates inpatients with SMI from a psychosis community service in South London ( $n=236$ ). Dates of first and second doses were recorded through audit; reasons for refusal of vaccination were noted. Patients were encouraged to take the vaccine. A re-audit was performed after allowing three months. Chi-squared statistical analysis was performed to determine the value of our intervention.