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 1.0×10^9 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±5,3 to 23,6±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±3,3 to 12,5±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 × 109 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±2,8 to 14,1±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.

Results: Before the intervention, 143 patients (60.6%) received at least one vaccine. 24 patients (10.2%) received one dose, and 77 (32.8%) were yet to receive any. There was no statistical significance (p=0.1509) between the number of patients who received a vaccine before and after intervention, with 33.1% of patients still remaining unvaccinated.

Image:

	Before intervention	After intervention
Vaccinated	143 (60.9%)	158 (66.9%)
At least one vaccine	121 (51.3%)	131 (55.5%)
No vaccine	93 (39.4%)	78 (33.1%)

Table 1. A table showing the proportion of patients who had received a vaccine, and those who had not. 'Vaccinated' implies a complete course.

Image 2:

Reasons for refusal	
Number not working/no answer/voicemail	27 (39.1%)
No reason given	9 (13.0%)
Not contacted	5 (7.2%)
Against the vaccine/not interested	17 (24.6%)
Has already	6 (8.7%)
Doesn't want to mix medications	1 (1.4%)
Unwell/has blood clots	2 (2.9%)
Agreed and booked	2 (2.9%)

Table 2. A table showing the reasons for refusal amongst the 69 patients who gave reasons for refusal

Image 3:

Patient demographics by ethnicity in our caseload	
Black British	49.3%
White	25.2%
Any other ethnic group	16.7%
Asian/Asian British	3.9%
Mixed Race	2.8%
Blank (unanswered)	1.4%
Not stated	0.7%

Table 3. Patient demographics by ethnicity

Conclusions: There is limited research on perceptions of receiving vaccines in patients with SMI, despite their cost-effectiveness in disease prevention. Even after intervention, 33.1% of patients remained unvaccinated, compared to 6.6% nationally. A lack of knowledge and recommendations from care teams are reasons for hesitancy. Misinformation, conspiracy theories and propaganda can drive people towards refusal. Patients with SMI typically have disadvantages of healthcare inequality, lower levels of education and access to inaccurate information. Patients and their healthcare team should be knowledgeable about vaccine efficacy and side effects. Studies have shown low uptake in the Black/African/Caribbean ethnic group (49.3%, table 3). Reasons include general mistrust in institutions and access barriers. For minority communities, vaccination sites in community centres or places of worship have proven to be effective, providing familiarity.

Patients taking clozapine may have a weaker immune system due to myelosuppression. 24.3% of our patients take this, with many unsure of interactions or side effects. Poorer prognosis means a focussed approach is needed.

Vaccine hesitancy is complex and requires targeted, tailor-made strategies, with consideration for patients who may lack capacity. It is evident from our results that calling patients alone may not be effective. A future multi-modal approach may be necessary to address poor vaccine uptake and opens up avenues to further explore vaccine hesitancy.

Disclosure of Interest: None Declared

EPP0682

Anxiously expecting during a COVID-19: a cross-sectional descriptive inquiry on the effects of the pandemic on pregnant women

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doi: 10.1192/j.eurpsy.2023.978

Introduction: While pregnancy itself is a risk factor in the development of anxiety disorders, the COVID-19 pandemic has brought additional pressure on expecting women. Despite these two independent factors, no study regarding their cumulative effect on anxiety in soon-to-be Romanian mothers exists.

Objectives: This study intends to address this deficiency by measuring the level of anxiety in a sample of pregnant women from the public healthcare sector in Romania.

Methods: Sociodemographic data and Zung Self-reported Anxiety Scores (SAS) were used to look at 121 pregnant women to get a fuller picture of anxiety in pregnant women during the pandemic.

Results: Some of the main findings of the study are as follows: anxiety symptoms are more intense during the first trimester of pregnancy, especially in the psychological domain of the scale, as opposed to the third one. High BMI was weakly correlated with lower Zung Scale scores, while marital status and having other children were moderately correlated with less anxiety symptoms. While no association could be found between history of infection, vaccination and anxiety, surprisingly, unvaccinated women showed less psychological distress than vaccinated ones (moderate correlation), suggesting that less anxiety prone women are also less likely to get adequate protection. Getting one's information from official sources also proved to be weakly correlated with higher Zung Scale scores.