European Psychiatry S841

**Results:** The first step is the educational diagnosis which allows to identify the personalized needs of the patient. The caregiver-educator sets with the patient the objectives to be achieved throughout the course, thus defining the educational contract. Then the patient and his entourage can follow a personalized therapeutic patient education program. We offer a program consisting of 7 sessions at the rate of one session per one to two months (2 individual sessions and 5 group workshops). At the end of the program, evaluation and self-evaluation grids are completed.

**Conclusions:** Therapeutic patient education provides knowledge through which patients with depression develop personal and interpersonal coping skills. This program will allow them to give an acceptable place to their disease so that they can evolve well with it.

Disclosure of Interest: None Declared

#### **EPV0447**

### Partner inclusive parenting intervention: Evidence of a culturally adapted low-cost group psychosocial intervention for depressed fathers

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**Introduction:** Depression is the leading cause of disability worldwide and low and middle-income countries (LMICs) carry over 80% of this disease burden. Attempts have been made to address depression in LMICs, with improvements in the home environment and maternal knowledge. However paternal depression is a neglected and under-researched area. Since maternal depression is associated with depression in fathers there is a need for partner inclusive parenting programs to address parental mental health and improve child outcomes.

**Objectives:** To evaluate the clinical and cost effectiveness of partner inclusive Learning through play plus (LTP+) intervention in reducing depression in fathers and mothers.

To evaluate the effectiveness of LTP + intervention in improving child outcomes.

To conduct process evaluation and identify challenges in transition to scale up of the intervention across Karachi, Pakistan from the perspective of fathers, mothers, and other stakeholders.

**Methods:** This is a cluster randomised controlled (cRCT) trial of partner inclusive group parenting program called (Learning Through Play (LTP+) across 18 towns in the city of Karachi. Over 5000 parents (fathers and partners) will participate in the study with a capacity building component of training 4000 Community Health Workers across Pakistan.

**Results:** This large cRCT will confirm the clinical and cost-effectiveness of LTP+ in reducing depression in parents and improving child outcomes along with the barriers and facilitators to implement the LTP+ group parenting program and the

possibilities to roll out the innovation at national level through engagement with policy makers.

**Conclusions:** Addressing depression in parents is hugely important because of its adverse effects both for child and parents. This low-cost group parenting program will help in scaling up the innovation across health services in Pakistan and other LMICs.

Disclosure of Interest: None Declared

#### **EPV0448**

The Influence of Probiotic Supplementation on Depression, Anxiety, and Stress Level, as well as Inflammation, Anthropometric and Metabolic Parameters in Patients with Depressive Disorders preliminary results of an RCT

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**Introduction:** There is a huge need to search for new treatment options for depression but as well as its comorbidities. Particularly, depression and metabolic abnormalities often coexist, while a pathophysiological overlap, including microbiota changes, may play a role. Thus, the trials of microbiota interventions (e.g., probiotics) may establish a safe and easy-to-use treatment option as an adjunctive therapy in patients only partially responsive to pharmacological treatment.

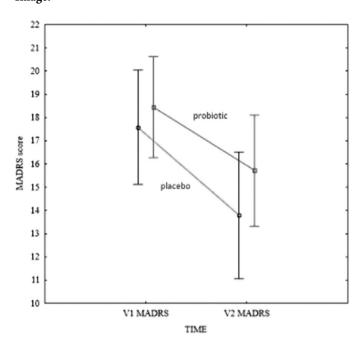
**Objectives:** The paper presents preliminary results of an RCT on the effect of probiotic supplementation on depression, anxiety and stress level, anthropometric, metabolic, and inflammatory parameters in adult patients with depressive disorders.

**Methods:** The trial was a two-arm, parallel-group, prospective, randomized, double-blind, controlled design that included 43 participants and lasted 60 days. The probiotic preparation contained Lactobacillus helveticus Rosell\*-52 and Bifidobacterium longum Rosell\*-175 in the amount of  $3\times 10^9$  colony forming units (CFU). We assessed depression level with Montgomery-Asberg Depression Rating Scale (MADRS), depressiveness, anxiety and stress level with 21-item version of Depression, Anxiety and Stress Scale (DASS-21), quality of life, blood pressure, body mass index and waist circumference, complete blood count, serum levels of C-reactive protein, high-density lipoprotein cholesterol, triglycerides, fasting glucose, selected secondary markers of inflammation and metabolic risk, as well as noninvasive biomarkers of liver fibrosis (APRI and FIB-4).

Results: There were no differences in sociodemographic traits and psychometric questionnaires scores, as well as in anthropometric and basic laboratory findings between placebo and probiotic group at the start of the intervention period. Interestingly, there was a statistically significant improvement in MADRS score in both, placebo (p=0,010) and probiotic group (p=0,037) after intervention (see figure). The same finding was observed in total DASS-21 score as well as anxiety subscale of DASS-21. However, there were no differences in anthropometric, inflammation or metabolic laboratory parameters at the end of the study regardless of intervention.

S842 e-Poster Viewing

#### Image:



Conclusions: Whilst probiotics may benefit some individuals who do not fully respond to antidepressant medications, our study did not show the superiority of probiotics over placebo in managing depressive and anxiety symptoms. However, the target clinical sample, as well as the intervention period and dosage of preparation for this intervention is not fully recognized. Moreover, larger clinical sample may be needed to detect differences between placebo and probiotics.

Disclosure of Interest: None Declared

#### **EPV0449**

## A Review of the Metabolism and Relevance to Form and Formulation of Ketamine

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**Introduction:** Ketamine is a phenylcyclohexylamine derivative comprising a racemic mixture of S- and R-ketamine that possesses anesthetic, analgesic, anti-inflammatory, and antidepressant activity. Oral (including extended release [PO]), intravenous (IV) sublingual (SL), transmucosal (TM), intransal (IN), intramuscular (IM), rectal (PR), and subcutaneous (SC) formulations have been developed since its commercialization in 1970.

**Objectives:** To review and understand the impact of different forms and formulations on the pharmacokinetics of ketamine.

**Methods:** The extant literature on ketamine metabolism and formulations was reviewed and discussed.

**Results:** IV (racemic) ketamine (KET) has been shown to improve depressed mood within 4 hours with maximal effect at 24 hours.

KET is a chiral molecule with two optimal isomers, R- and S-KET. KET is stereoselectively metabolized by CYP2B6 and CYP3A4 initially via nitrogen demethylation to active metabolite, norketamine (NK); there is no interconversion between R- and S-KET. NK is further metabolized to hydroxynorketamine (HNK) by CYP3A4 and CYP3A5; and dehydronorketamine (DHNK) by CYP2B6. Additional metabolic pathways exist including a direct enantioselective hydroxylation of KET to 6-hydroxyketamine (HK). Bioavailablity is greatest (100%) with the IV racemic KET formulation, but as low as 8% for oral S-KET due to extensive first-pass metabolism; the KET: NK ratio is a measure of first pass metabolism. NK plasma levels are higher with oral S-KET than KET as a result of local intestinal metabolism effects. Additionally, greater plasma concentrations are noted with IV bolus doses of S-KET vs. racemic KET or R-KET. S-KET possesses a longer elimination half-life than racemic KET due to inhibition by R-KET. KET is primarily renally eliminated and twice as fast in children vs. adults. **Conclusions:** Complex interactions are reported between ketamine form (racemic/enantiomer), formulation, dose, and route of administration that impact on clinical variables and thus, outcome.

Disclosure of Interest: None Declared

#### **EPV0450**

# Catatonia in depressive disorder, more usual than it is supposed to be

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**Introduction:** Catatonia is a psychomotor syndrome characterized by various motor, affective and behavioral symptoms. It can occur as a cause of various underlying organic and psychiatric disorders. In Psychiatric nosology is used to specify a subtype of the disorder underlying. Unlike what was assumed in the past, today it is accepted that catatonia is more frequent in affective disorders than in schizophrenia. But despite this, diagnosis and treatment are still late in affective cases on many occasions.

**Objectives:** -A case of catatonia is presented to review the diagnostic difficulties that can sometimes entail.-Review treatment algorithm. **Methods:** We present the case of a 62-year-old woman, initially diagnosed of major depressive symptoms with psychotic symp-

diagnosed of major depressive symptoms with psychotic symptoms, showing no response to different treatments, evolving to catatonia, which is diagnosed after screening for neurological and medical diseases.

**Results:** The patient had an adequate evolution after the withdrawal of antipsychotics and the application of ECT (Electroconvulsive therapy).

**Conclusions:** - It is important to carry out an adequate screening, because many times the symptoms are caused by medical or neurological diseases.

-Catatonia has a good prognosis with an early treatment, but it may increase the risk of mortality after 5 days from the onset of symptoms. -It is important to avoid the use of antipsychotics or other dopamine blockers. The use of benzodiazepines and ECT is indicated.

Disclosure of Interest: None Declared