

and arousal to orgasm and pain. Psychological factors, such as dysfunctional beliefs about sexuality, play a significant role in the development and perpetuation of sexual dysfunctions (Nobre, Pinto-Gouveia, 2006; Nobre, Pinto-Gouveia, 2008). Additionally, personality traits, particularly those associated with the Dark Triad (Machiavellianism, narcissism, and psychopathy), have been suggested as potential protective factors to sexual problems, probably in interaction with sexual assertiveness and a wider experience in sexual behavior (Pilch, Smolorz, 2019).

**Objectives:** This study investigates the interplay between sexual dysfunctions, sexual dysfunctional beliefs, and Dark Triad personality traits, and compares the differences and similarities in the two different cultural (Hungarian and Spanish) samples.

**Methods:** Both samples were collected online by sharing the questionnaires on various platforms. Apart from the demographic and sexuality related background questions (age, sex, gender, sexual orientation, sexual lifestyle, etc.) our set of questionnaires included the Arizona Sexual Experience Scale (ASEX), Sexual Dysfunctional Beliefs Questionnaire (SDBQ, Male and Female Version) and The Short Dark Triad Questionnaire (SD3).

**Results:** The Hungarian sample consists of 465 participants, the Spanish of 215. However, the processing of the data is still underway, our preliminary results show, that there is a connection between the number of dysfunctional beliefs and occurrence of sexual dysfunctions. Just like Dark Triad traits seem to have negative correlation with dysfunctions.

**Conclusions:** Our research gives an opportunity to a better understanding of the psychological background of sexual dysfunctions. By taking in consideration the relationship between dysfunctional beliefs and said disorders, professionals can optimize sexual education to aid the prevention of them. Nevertheless, our findings can help the practice of psychotherapy in finding more advanced treatments, thus improving individuals' overall sexual, and general well-being.

**Disclosure of Interest:** None Declared

## EPP0692

### Tunisian parents' expectations and approaches regarding sex education of their children according to their age: a cross-sectional study

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doi: 10.1192/j.eurpsy.2024.777

**Introduction:** Adolescents often lack vital information for making wise sexual and reproductive decisions, leading to risks like abuse, unwanted pregnancies, and infections. Comprehensive, early, and age-appropriate sex education is crucial. While parents should play a significant role, many underestimate their responsibility. The perception of sex education is changing, with younger parents being more open to participating in their children's education.

**Objectives:** This study compares the approaches of Tunisian parents with adolescent and pre-adolescent children towards sex education.

**Methods:** This study used a cross-sectional design to collect data from Tunisian parents of children between the ages of 1 to 18 using an online survey. Two groups were recruited based on the age of their children, one group had parents of children younger than 10 years old, and the other had parents of adolescents. The survey included questions about the participants' demographics, approach to sex education, reasons for their approach, and opinions on sex-related education in public schools. The survey was anonymous and confidential, and data were collected from January to March 2023 through various social media platforms.

**Results:** This study surveyed 232 Tunisian parents with children between the ages of 1 and 18, divided into two groups based on the age of their children. The majority of participants were female (62.1%) and married (81.9%). The majority of participants in both groups agreed that sex education is important and indispensable, but only 54.7% of parents in the older children group responded positively to teaching sexual education as an independent subject. There was a significant difference between the two groups regarding their opinions about the appropriate age of sexual education for their children, and who they think should discuss sexual and reproductive health with young people. Most participants indicated that the human body and its development, sexual and reproductive health, prevention of sexually transmitted diseases and infections, contraception as well as puberty are the most important subjects to be addressed. Sexuality and sexual behaviors, the concepts of violence and safety, interpersonal relationships, consent, insults, harassment, and sexist cyberbullying were less frequently mentioned.

**Conclusions:** In conclusion, this study highlights the importance of sex education in Tunisia. Parents in both groups support it but differ on timing and integration. Barriers like communication challenges and religious beliefs exist. These insights can guide tailored sex education programs for Tunisian parents, promoting youth sexual and reproductive health.

**Disclosure of Interest:** None Declared

## Neuroscience in Psychiatry

### EPP0695

#### Electroencephalogram monitoring during ketamine antidepressant treatment: a pilot study

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doi: 10.1192/j.eurpsy.2024.778

**Introduction:** Depression is a major cause of disability world-wide. Up to a third of patients have a treatment-resistant form (TRD), presenting a major challenge. Ketamine has been introduced as a novel rapid-acting antidepressant effective in this population. However, at present, ketamine treatment is not routinely informed by any objective neural markers. Basic research has shown promising electroencephalogram (EEG) changes including a decrease in alpha power. However, clinical translation is lacking.

**Objectives:** Assess the feasibility of identifying EEG correlates of ketamine infusions in a routine outpatient setting with a low-cost, easily usable system.

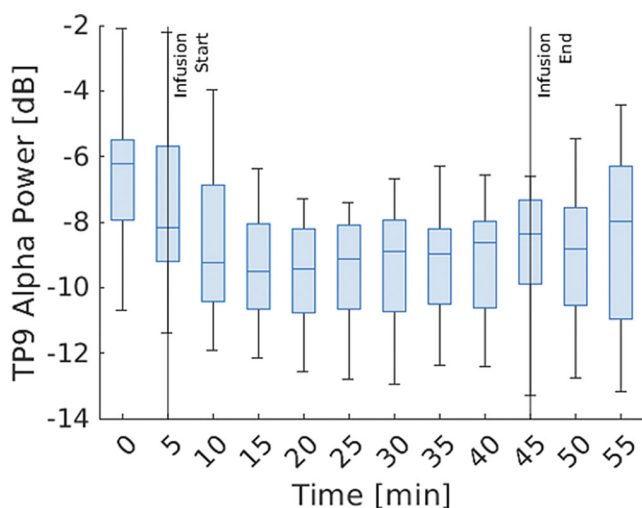
**Methods:** The study was carried out at the Oxford Health Foundation Trust Ketamine Clinic (ethics reference 22/EM/0226). N=18 EEG recordings from N=12 patients were collected (5 women, mean age 44, range 33-62, IV dose 0.5-1mg/kg over 40min). 4-channel EEG was collected with a Muse-S headband at 256Hz, from 5min before to 55min after infusion start. 5s epochs were rejected if gyroscope data indicated head movement above 10 deg/s or if amplitude was above 200µV. A spectrogram (4s window, 3s overlap) as well as band-limited power (theta: 4-8Hz, alpha: 8-13Hz, beta: 13-25Hz) were computed. Significance of changes was found with a repeated measures analysis of variance (RM-ANOVA) on power in 5min segments together with post-hoc Tukey's P-values.

**Results:** Across the ketamine infusion recordings, there was a significant effect of time ( $F=3.65$ ,  $P=0.0105$ ) and Channel\*Time interaction ( $F=3.80$ ,  $P<0.001$ ) on the EEG spectrum. Effects were largest on temporal electrodes, particularly TP9 in the alpha and theta bands (Figure 1, Table 1).

**Table 1:** Effect sizes (Cohen's d) and FDR-corrected ANOVA P-values for ketamine effects on each EEG channel and frequency band.  $P<0.05$  was considered significant (bold). n.s. = not significant ( $P>0.2$ ).

Channel / Band	TP9	AF7	AF8	TP10
Theta	<b>1.16 (P=0.019)</b>	0.11 (n.s.)	0.11 (n.s.)	0.42 (P=0.113)
Alpha	<b>1.41 (P&lt;0.001)</b>	0.12 (n.s.)	0.17 (n.s.)	0.605 (P=0.113)
Beta	1.19 (P=0.112)	0.03 (n.s.)	0.08 (n.s.)	0.21 (n.s.)

#### Image:



**Conclusions:** In a routine outpatient setting, sub-anaesthetic ketamine infusions in TRD patients were associated with decreased fronto-temporal EEG alpha and theta power. Future work should

assess the potential of low-cost routine EEG, and alpha desaturation specifically, to inform individualised ketamine treatment.

**Disclosure of Interest:** None Declared

#### EPP0696

### The primary motor cortex of schizophrenia patients show neuronal and subcellular impairments in the right hemisphere – postmortem study

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doi: 10.1192/j.eurpsy.2024.779

**Introduction:** In mental disorders, very little is known about the cellular and subcellular mechanisms underlying the development of symptoms. Postmortem studies can contribute to understanding these. Our research group collects and studies cortical samples with short postmortem intervals from schizophrenia patients.

**Objectives:** We investigated primary motor cortical brain samples, to understand the background of motor symptoms in schizophrenia.

**Methods:** Both hemispheres of primary motor cortices of eight control- and eight subjects with schizophrenia were analysed by immunohistochemistry. We labelled pyramidal cells with SMI32 antibody, which binds to neurofilaments, and parvalbumin (PV) antibody, which labels one type of inhibitory input on these cells, axo-axonic and axo-somatic interneurons, and a proportion of giant pyramidal neurons (Betz cells). We were interested in the size and density of layer 3 and 5 pyramidal cells and Betz cells, the distribution of PV-labelled terminals and the PV expression of Betz cells. Results of the subjects were compared both as a whole and separately per hemisphere.

**Results:** Most changes were present in the primary motor cortices in the right hemisphere (presumably subdominant). Here, the density of Betz cells and their inhibitory inputs were also reduced. PV-expression of Betz cells was not dependent on the group studied, but we observed that it is decreasing with age. The other investigated characteristics show no significant differences.

**Conclusions:** Our results suggest that the primary motor cortex may be involved in schizophrenia. Neurodevelopmental, pharmacological and neurodegenerative causes could be involved in this process. Network dysconnectivity is likely to underlie the stronger involvement of the subdominant side, and literature data point also in this direction. We believe that our research method is suitable for the study of the background of other symptoms and may lead to a better understanding of schizophrenia, especially if we could combine our results with clinical research.

**Disclosure of Interest:** None Declared