Treatment typically involves 7 sessions over a span of a month, with an initial test dose of 0.25 mg/kg.
Results: Ketamine infusions were administered to a total of 208 patients. The majority of participants experienced a slight increase in blood pressure, while there were no significant changes in cardiac rhythm. Additionally, almost all patients reported experiencing dizziness or headaches during the infusion. Notably, nearly half of the patients reported an alteration in taste perception as a side effect. It's important to highlight that all observed side effects, spontaneously resolved within an hour after the conclusion of the infusion. However, in a small subset of cases (six instances), the side effects were severe enough to necessitate the premature termination of the ketamine infusion
Conclusions: Although ketamine demonstrates a favorable safety profile with minimal major side effects when administered following our established safety protocol. However, we want to underscore the critical importance of vigilant patient monitoring during ketamine administration and the prompt addressing of any adverse effects. This proactive approach is paramount to ensure the safety and overall well-being of patients receiving ketamine treatment

Disclosure of Interest: None Declared

EPP0613

Exponential increase in the number of prescriptions for ADHD medication between 2012 and 2022 for in Poland.

M. Rzeszutek[1]* and L. Konowałek[1]

[1]Department of Child Psychiatry, Medical University of Warsaw, Warsaw, Poland
*Corresponding author.
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Introduction: ADHD medication prescribing trends are increasing in North America and both Northern and Western Europe (Raman, Sudha R *et al. Lancet Psychiatry.* 2018;5(10):824-835). Methylphenidate and atomoxetine are two substances available for use in ADHD in children and adolescents in Poland. To our knowledge, there is the lack of data on prescription trends for Poland and Middle-Eastern Europe.
Objectives: The aim of the study is to estimate the increase in the total number of prescriptions for methylphenidate and atomoxetine and factors influencing it, like the impact of the proportion of prescriptions for women and for people aged 18-24 on.
Methods: Methylphenidate and atomoxetine prescription data for the period between 2012-2022 and for patients aged 5-59 were obtained from e-Health Centre, which contains data on prescribed medications in Poland. We conducted a series of linear regression models to explore the relationship between the number of prescriptions as the dependent variable and calendar year as the independent variable. Additionally, we considered two more variables: Percentage of prescriptions for women and percentage of prescriptions people aged 18 – 24. Further, we decided to run a mediation analysis to see whether the effect of calendar year was mediated by percentage of women.
Results: We analyzed data on 925,536 prescriptions for methylphenidate and atomoxetine.
The model demonstrates a robust and statistically significant ability to explain the variance in the log-transformed dependent variable (R^2 = 0.98, F(2, 8) = 201.14, p < 0.001). The model's intercept, corresponding to calendar year = 0 and percentage of prescriptions for women = 0, is estimated at -93.95, with a 95% confidence interval of [-152.74, -35.15]. The t-statistic for the intercept is -3.68, and the associated p-value is 0.006, demonstrating its statistical significance.
Within this model, the effects of the independent variables are as follows:

1. Calendar year (β=0.05, t=4.07, IC95%: (0.02, 0.08), p<0,004)
2. Percentage of prescriptions for women (β=0.06, t=4.18, IC95%: (0.02, 0.09), p<0,003)

The inclusion of the percentage of prescription for people aged 18-24 doesn't improve the model's ability to explain the variation in the number of prescriptions.
Mediation analysis showed that the indirect effect of percentage of prescriptions for women were significant.
Conclusions: These results provide robust evidence for the predictive power of the model, with both calendar year and percentage of women emerging as statistically significant and positively associated with the log- transformed dependent variable.
Between 2012 and 2022, the number of prescriptions for methylphenidate and atomoxetine increased exponentially in Poland. The percentage of prescriptions for women significantly contributed to the increase in the total number of prescriptions for methylphenidate and atomoxetine in Poland.

Disclosure of Interest: None Declared

Suicidology and suicide prevention

EPP0614

Improving prediction of 12-months suicidal attempts in bipolar disorder: a machine learning study

A. Pigoni[1]*, G. Delvecchio[1], C. Pini[2], L. Cirella[1], C. Prunas[1], N. Turtulici[1], L. Squarcina[1] and P. Brambilla[2]

[1]Department of Neurosciences and Mental Health, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico and [2]Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy
*Corresponding author.
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Introduction: Bipolar disorder (BD) is a recurrent disorder, causing functional impairment and **raised mortality, particularly due to suicide**. However, the difficulty in predicting suicidal behaviors relies in the **lack of clear biomarkers**.
Machine learning (ML) has emerged as a promising tool to enhance suicidal prediction. However, most **ML studies focused on lifetime attempts**, without having a predictive time window, and **did not employ time-dependent variables**. Moreover, most studies lie on cross-sectional databases, without including more than one timepoint.
Objectives: First, we aimed to predict 12-months **suicide attempts** in a naturalistic sample of BD patients, using clinical and demographic data.

Second, we aimed to improve the prediction by including information from intermediate visits (1, 3, and 6 months), mimicking more closely the clinician's way of thinking and the multiple observations a patient receives.
Methods: A sample of 163 BD patients (53% females, mean age 44.7, SD 15.3) were recruited.
Based on EHR, **56 clinical and demographic features were extracted**, **including hospitalizations, suicidal behaviors lifetime and in the last 12 months**, along with comorbidity, family history, work, and therapies. **Patients were followed up for 12 months.**
Support Vector Machine (SVM) was used to differentiate subjects who attempted suicide versus those who did not **in a 12-month time window**, within a repeated nested Cross-Validation. The **SVM was optimized weighting the hyperplane** for uneven group sizes. Then, **we repeated the analysis including information from intermediate visits** (1, 3, 6 months after the first contact). **For each visit, we created a composite score** based on current therapy, new admissions, and ER presentations. To avoid circularity, all the information (ER, admission etc.) related to a suicide attempt were not included.
Results: During the 12-months follow-up, **9.8% of patients attempted suicide**. The results from the 12-months suicide prediction model obtained an Area Under the Curve of 0.71(with a Balanced Accuracy (BAC) of 68%).
After incorporating the composite scores based on intermediate visits in the model, the prediction raised to an Area Under the Curve of 0.78 (BAC 73%), suggesting that including intermediate visits is a valid method to improve prediction.
The features that contributed the most to the prediction were **the composite score at 6-month visit, lifetime number of suicide attempts, suicide attempts in the last 12 months, substance of abuse** (other than cannabis), and antipsychotics.
Conclusions: ML proved a good prediction accuracy for suicide in a 12-months time window, and the prediction was improved by including data from intermediate visits. **The model showed the importance of time-dependent features, such as attempts in the last 12 months.** Our analysis might help in identifying early clinical risk factors and underlies **the importance of multiple evaluations in populations at risk**.

Disclosure of Interest: None Declared

EPP0615

Suicidal behavior in homeless population and its relationship with experienced aggressions: A seven-year longitudinal study.

F. Calvo[1]*, R. Alfranca[2], X. Solench-Arco[3], C. Giralt[4], I. Forcada[2] and S. Font-Mayolas[5]

[1]Departament de Pedagogia, Institut de Recerca sobre Qualitat de Vida; [2]Institut Català de la Salut, Centre d'Atenció Primària Santa Clara; [3]Universitat de Girona; [4]Institut Català de la Salut, Centre d'Atenció Primària Blanes 2 and [5]Departament de Psicologia, Institut de Recerca sobre Qualitat de Vida, Girona, Spain
*Corresponding author.
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Introduction: Suicide is a serious and complex public health issue that affects millions of people worldwide. Among the most vulnerable populations are homeless individuals (HIs), whose suicide rate is significantly higher than that of the general population.
Objectives: The aim of this study was to analyze mortality and suicidal behavior in a cohort of HIs during a seven-year follow-up. Additionally, the study sought to identify variables linked to mortality in this population.
Methods: The study was conducted in the province of Girona, Spain, and included 154 HIs who were literally experiencing homelessness. Self-report questionnaires were used to gather sociodemographic data, assess suicide risk, and measure the severity of substance dependence. The follow-up was carried out between 2015 and 2022, collecting data on mortality, suicide attempts, episodes of overdose, and violence experienced from public health services (psychiatric and primary health care services).
Results: During the seven-year follow-up, 23 individuals (14.3% of the sample) passed away, with an average age at the time of death of 52.6 years. The main causes of death were cancer, suicide (excluding overdose), and accidental overdose. Methods used for suicide included drug overdose, jumping, and vein slashing. All deceased individuals had scores above the threshold on the Plutchik Suicide Risk Scale and had reported previous suicide attempts.
Individuals who experienced violence during the follow-up period exhibited more severe suicidal ideation, more suicide attempts, and more non-lethal overdose episodes. Substance dependence, particularly cocaine dependence and dual pathology, was significantly associated with higher mortality.
Conclusions: This study reveals a high mortality rate among HIs, especially due to suicide and accidental overdose. The most significant variables related to mortality were suicidal ideation, the number of previous non-lethal overdoses, and substance use disorders, with cocaine dependence being prominent. The results underscore the need for specific prevention and treatment programs to address suicide risk factors and improve the mental health of homeless individuals. The importance of conducting interventions in specialized centers that detect and address suicide risk in this vulnerable population is also emphasized.

Disclosure of Interest: None Declared

EPP0616

Certain immune parameters may have a significant impact on suicidal behaviour - a naturalistic study among psychiatric in-patients

V. Voros[1]*, E. Saghy[2], C. Molnar[1], M. Kovacs[1], B. Peto[1], S. Kovacs[2], A. Zemplenyi[2], S. Fekete[1], T. Tenyi[1] and P. Osvath[1]

[1]Department of Psychiatry and Psychotherapy and [2]Center for Health Technology Assessment and Pharmacoeconomic Research, Faculty of Pharmacy, University of Pecs, Pecs, Hungary
*Corresponding author.
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Introduction: Several research already proved the role of certain immunological factors (neutrophil-lymphocyte (NLR), monocyte-lymphocyte (MLR) and platelet-lymphocyte (PLR) ratio, and C-reactive protein (CRP)) in the background of suicidal behaviour.
Objectives: The aim of this research was to study the association between routinely measurable low-grade inflammation parameters