

Conclusions: There is no universally agreed-upon definition for treatment resistance. In this sample, different definition and staging methods were employed to examine the similarities and differences in the clinical and treatment related characteristics of groups with TRD identified with each. The reasons and possible implication of concurrence and discordance between the methods will be discussed.

Disclosure of Interest: None Declared

EPP0379

Exploring the Interplay Between Early Maladaptive Schemas and Depression: A Comparative Analysis

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Introduction: Depression, a pervasive mood disorder, significantly impairs one's quality of life. Early Maladaptive Schemas (EMS), ingrained thought patterns stemming from early life experiences, play a pivotal role in shaping adult beliefs and behaviors. This study delves into the relevance of specific EMS domains—Emotional Inhibition (EI), Negativity/Pessimism (NP), and Social Isolation/Alienation (SI)—in influencing the severity of depression among medical students and diagnosed patients.

Objectives: Our primary goal was to assess the correlation between specific EMS domains and depression severity in medical students and clinically diagnosed patients. We aimed to elucidate whether these schemas could serve as indicators for potential depressive tendencies or if they had a stronger association in those already diagnosed with depression.

Methods: We conducted a prospective cross-sectional analysis involving 73 medical students and 61 diagnosed depression patients (aged 18-32). Four key variables—Depression, EI, NP, and SI—were measured using the Beck Depression Inventory-2 and The Young Schema Questionnaire-Short-form-3 in the Romanian context. Statistical analyses, including correlation coefficients and t-tests, were employed to explore the relationships between EMS domains and depression severity.

Results: In the non-clinical sample, we identified moderate, statistically significant correlations between depression and EI ($r=0.63$), NP ($r=0.71$), and SI ($r=0.59$). Conversely, the clinical sample exhibited slightly weaker, yet significant correlations (EI- $r=0.42$, NP- $r=0.39$, SI- $r=0.29$). Notably, significant differences emerged between the groups in all measured variables. These findings imply that while a positive correlation between EMS variables and depression exists in both samples, the association weakens in diagnosed patients, indicating that these schemas may be less predictive in this population.

Conclusions: Our study underscores the importance of understanding EMS domains in assessing depression severity. While specific schemas—EI, NP, and SI—correlate with depression in both medical students and diagnosed patients, this link is notably weaker in the latter group. Elevated EMS variables suggest a potential for future subclinical depression in medical students, but they

might not strongly predict depression in those already diagnosed. These nuanced insights have implications for preventive interventions and therapeutic approaches tailored to individuals at different stages of depression, thereby enhancing targeted mental health care strategies.

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DNA methylation signatures support the role of neutrophils and monocytes in depression

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Introduction: Research repeatedly linked inflammation with major depressive disorder (MDD). The presence of an inflammatory subtype of depression is supported by molecular findings as well as imaging reports. We investigated the cell type composition estimated by using epigenome-wide DNA methylation markers in a sample of depressed individuals showing high or low inflammation levels measured by hsCRP. We aimed to understand the connection between depression and inflammation, specifically differences in cell type compositions between high and low inflammation groups at baseline.

Objectives: 119 individuals with MDD were included for this analysis. Following quality control procedures, 113 participants were included in the analysis ($M_{age}=47$ years, 57.98% women). The sample consisted of 37 individuals with high hsCRP (hsCRP > 1.5, $M_{age}=45$, $M_{hsCRP}=8.2$, $M_{MADRS}=28$, 70% women) and 76 individuals with low hsCRP (hsCRP < 1.5, $M_{age}=44$, $M_{hsCRP}=0.99$, $M_{MADRS}=28$, 49% women).

Methods: The Illumina Infinium MethylationEPIC 850k BeadChip was used for analyzing whole blood derived DNA. Data processing and cell type estimation was conducted using the RnBeads package. We applied the Houseman method to estimate cell type composition through epigenome-wide DNA methylation signatures, resulting in six cell types: neutrophils, natural killer cells, B cells, CD4+ T cells, CD8+ T cells and monocytes. Comparisons between both groups were tested using ANOVA.

Results: High and low hsCRP groups were compared for each of the six cell types estimated. A statistically significant difference was seen for monocytes ($p=0.0316$) and a trend for neutrophils ($p=0.0742$). The mean values for neutrophils in patients without inflammation were found to be 60%, while in patients with inflammation, it was 63%. For monocytes, the mean values for patients without inflammation and those with inflammation were 10% and 9.4%, respectively, with a smaller range (4.5%-14.3%) for individuals with inflammation as compared to patients without inflammation (5.3%-20.7%). None of the other four cell types showed a statistically significant difference.

Conclusions: We identified differences in the cell type composition between groups of depressed patients with high versus low inflammation. These results align with the existing body of knowledge reported in established academic literature. Our study