Clinical Correlates of Opioid Use Disorder Symptom Scores: Retrospective Analysis of Patient-Reported Treatment History

Saisantosh Ponna[1], Michael A. Bushey[2]

[1]Indiana University School of Medicine

[2]Department of Psychiatry, Indiana University School of Medicine

Background: Opioid Use Disorder (OUD) remains a critical public health issue, particularly in pain management settings where long-term opioid therapy is common. While identifying patients at risk for developing OUD is essential for safe treatment, validated screening tools remain underutilized in clinical practice. This study aimed to validate an OUD symptom checklist and investigate whether distinct opioid prescribing patterns correlate with OUD symptom severity.

Methods: We conducted a retrospective, cross-sectional analysis using de-identified data from patients seen in the Indiana University Health Pain Navigation Service during 2023, who completed an 11-point OUD Symptom Checklist measuring symptom severity through REDCap. Participants were categorized into opioid exposure groups (low: 1-2 opioids; medium: 3-4 opioids; high: 5+ opioids). Exploratory analyses investigated opioid exposure grouped by pharmacological mechanism (full agonists vs. partial/mixed agonists). One-Way Analysis of Variance (ANOVA) was performed, with analyses stratified by current opioid prescription status to account for variations in OUD symptom score computation.

Results: Our findings revealed no statistically significant overall differences in OUD symptom checklist scores across the defined opioid exposure groups in either the "currently prescribed for pain" or "not currently prescribed for pain" subgroups. Similar results were found for mechanism-based grouping. For participants currently prescribed opioids for pain, median OUD scores were 0 (Low, N=42), 0 (Medium, N=51), and 1 (High, N=63). For those not currently prescribed opioids for pain, median OUD scores were 0 across all groups (Low, N=41; Medium, N=48; High, N=49). Mean OUD scores were consistently low across all groups.

Conclusions: Neither the number of distinct prescribed opioids nor broad pharmacological mechanism groupings served as primary predictors of OUD symptom severity. These findings suggest that simple prescribing pattern metrics may be insufficient for OUD risk stratification and highlight the need to explore additional patient characteristics and factors.