Poster Title: Impact of pharmacologic interventions for psychiatric comorbidities among inpatients with alcohol use disorder

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Background: Alcohol use disorder (AUD) is a highly disabling condition characterized by uncontrolled drinking, a heavy dependence on alcohol, and even life-threatening withdrawal symptoms responsible for more than 500,000 annual hospitalizations nationwide. Research has consistently demonstrated a strong association between AUD and comorbid psychiatric illness, which contributes to poor AUD treatment outcomes. While many studies support a primary focus on non-substance related psychiatric treatment in comorbid AUD patients, evidence is particularly scarce for inpatient settings.

Objective: To evaluate the impact of pharmacologic interventions for comorbid psychiatric disorders on readmission rates among inpatients with AUD.

Methods: This was a single-center, comparative, descriptive study approved by the facility’s Institutional Review Board. A retrospective medical chart review was performed on patients admitted between June 1st, 2017 and March 1st, 2019 and treated for alcohol withdrawal syndrome (AWS) based on their Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar) score. Index admission was defined as the subject’s first qualifying hospitalization within the specified date range. Patients > 18 years, treated per CIWA-Ar protocol during admission, and discharged with living status were included. Subjects who were transferred, on comfort care status, pregnant, or incarcerated were excluded. The primary endpoint was 180-day AUD-related readmissions, defined as readmissions involving treatment per CIWA-Ar protocol within 180 days following index admission. Secondary endpoints included total 180-day readmissions. Subjects discharged with new or adjusted non-AUD related psychotropic medications composed the intervention group, while patients discharged with no changes were placed in the control group. Data was de-identified using alphanumeric coding and organized with descriptive and inferential statistics, with statistical significance determined by *p* < 0.05.

Results: Of the final study population (n=364), both control (n=163) and intervention (n=201) groups included a majority of males [135/163 (83%) vs. 133/201 (66%)], *p* < 0.001. Mean ages were statistically different between groups, with older patients seen in the control group (57+14.2 years) versus the intervention group (46+14.1 years), *p* < 0.001. Mean number of AUD-related readmissions was 0.15 (+0.4) in the control group versus 0.10 (+0.3) in the intervention group (*p* = 0.22). Mean number of total readmissions was 0.35 (+0.9) in the control group versus 0.15 (+0.4) in the intervention group (*p* = 0.007).

Conclusion: Study findings show no significant difference in AUD-related readmissions between groups but significantly fewer total readmissions in the experimental group versus the control group. While treatment of concurrent AUD and other psychiatric illnesses can be complex, it may be appropriate to address comorbid psychiatric concerns during inpatient admissions involving alcohol withdrawal. Potential solutions may include more frequent and/or comprehensive psychiatric evaluations. Further research is warranted to determine which patients would benefit most based on presence and severity of specific comorbidities, AUD history, and type of intervention(s) made.