T4. BUPRENORPHINE TREATMENT RETENTION IN INDIVIDUALS WITH OPIOID USE DISORDER: INSIGHTS FROM REAL-WORLD DATASET

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Abstract

Introduction: Opioid Use Disorder (OUD) is a chronic relapsing disorder and a growing cause of overdose deaths in the US. Buprenorphine (BUP) is effective in OUD, but treatment discontinuation represents the greatest obstacle to effective treatment (Brorson 2013). Conversely, treatment retention is associated with higher rates of employment and opioid abstinence, and with lower relapse rates as compared to patients who discontinue treatment [Kleber 2007]. BUP treatment retention in real world settings may be affected by medication dosing patterns and other clinical and sociodemographic patient features, as well as by care settings. Here we systematically analyzed a large longitudinal dataset from electronic health records (EHR) to examine the effects of these factors on treatment retention in adults with OUD.
Methods: Anonymized patient EHR data (2009-2018) for patients with OUD (aged 15 or over) were used in a retrospective study to determine whether certain prescription regimens were more effective than others, along with treatment setting at treatment initiation (i.e., inpatient, intensive outpatient, outpatient), sociodemographic and clinical variables (e.g., psychiatric comorbidities and medications). Dropout from BUP and from SUD treatment overall were based on a data-driven approach, and clinical judgment. Survival analyses of treatment dropouts examined the effect of different clinical, sociodemographic, concurrent SUD conditions and overall disorder severity as measured in the Clinical Global Impression - Severity (CGI-S) scale. We compared dosing trajectories and their relative efficacies.
Results: More than 5,000 patients with comparable numbers of men and women formed the study cohort. Most participants were non-Hispanic/Latino white. Other SUD comorbidities, especially alcohol abuse, were common, and patients had an average CGI-S of 4.8 +- 1.1 at BUP initiation. Overall, patients were more likely to remain in treatment if they were treated in an outpatient facility and had a lower CGI-S value at the start of treatment. Furthermore, people with a comorbidity of cannabis were more likely to drop out of treatment faster than those with no other comorbidities. The effect of having other SUD comorbidities appear to be marginal in terms of dropout. The most common doses for BUP were 16 mg/day, 8 mg/day, 4 mg/day, and 24 mg/day, in that order. Most patients received less than four dose changes within a year. Of Only 10.1% of individuals who began BUP were still on it at a year and 8.5% were still in treatment at that time but not on BUP. The mean number of days in treatment was 6576 days. It appears that patients who start with an initial dose of 8 mg/day stay in treatment on average longest of 81 days.
Conclusion: Treatment retention is extremely poor with BUP treatment of OUD. Those with

greater OUD severity and comorbid cannabis use disorder at treatment initiation have a higher propensity of premature treatment discontinuation. An initial dosing of 8 mg/day appears to be the best course of treatment for patients suffering from OUD.