Assessing the Adherence of Buprenorphine Treatment among Patients Discharged from the Emergency Department after an Overuse Event: A Retrospective Study

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Background:

In the ongoing opioid epidemic, accessing initial treatments like buprenorphine remains challenging. Individuals discharged from the emergency department (ED) post-overdose face a heightened risk of recurrence, emphasizing the critical need for initiating Medications for Opioid Use Disorder (MOUD). This is a retrospective cohort study to describe the buprenorphine adherence and identify any associations related to adherence using Controlled Substance Utilization Review and Evaluation System (CURES).

Methods:

Patient data was analyzed from the Los Angeles General Medical Center's ED from October 2022 to December 2023 with diagnosis codes T40 (opioid poisoning) and F11 (opioid use disorder). Then, an outpatient CURES search was conducted for buprenorphine dispensing records. Proportion of days covered (PDC) to gauge adherence was calculated using the days supply from the CURES recorded divided by days since hospitalization. T-tests were used to assess mean adherence of cohorts.

Results:

Of 1349 ED encounters, 156 (11.6%) were prescribed buprenorphine and were analyzed. After CURES data collection, 70 (44.9%) patients had at least one buprenorphine fill recorded in CURES and the rest 86 (55.1%) had no CURES record after hospitalization. Of the 70 patients that had buprenorphine fills, 44 (62.9%) had PDC \geq 80% at 30 days since ED visit, 12 (17.1%) had PDC \geq 80% at 60 days, 7 (10%) had PDC \geq 80% at 90 days.

Conclusion:

The trend of patients with PDC ≥80% buprenorphine adherence decreased (45.8%) between 30 and 60 days since hospitalization.Two-sample T-tests were performed to compare adherence between those who picked up first prescription within 3 days of ED

visit and those who picked up first prescription >3 days after ED visit. Adherence was greater for patients who received buprenorphine within 3 days of their hospitalization than for those who took more than 3 days to get the first fill (p-value: 0.014).