to immediate home modifications, many patients were referred to physical therapy or received additional home services and/or assistive devices. Additional medical needs include medication reassessment and further evaluation for cognitive decline. Future randomized trials will evaluate clinical and patient-reported outcomes.

No, authors do not have interests to disclose

Patterns of Chemical Restraint Use for Emergency Department Patients With Acute Mental Health Distress



Lippert S, Xu R, Tucker L-Y, Rabbani J, Rauchwerger A, Kene M/Kaiser Permanente Northern California, Oakland, California, US

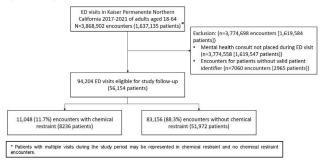
Objectives: Recent literature describes racial disparities in use of physical restraints among emergency department (ED) patients. Granular data on the more commonly applied chemical restraints and potentially serious adverse outcomes are not well characterized. We sought to describe patient characteristics and adverse outcomes associated with receiving nonconsensual chemical restraint in the ED.

Methods: We conducted a retrospective study of adult patients aged 18-64 years who presented to one of 21 Kaiser Permanente Northern California (KPNC) EDs in 2017-2021 and for whom a mental health consultation was initiated. Chemical restraint was defined as an initial intramuscular dose of sedating and/or antipsychotic medications given in the ED. We defined our composite adverse outcome as supplemental oxygen administration above baseline use, intubation, or cardiac dysrhythmia during the ED stay, and ICU admission. We conducted generalized estimating equation (GEE) analysis with a logit-link function to estimate adjusted odds ratios (aOR) and 95% confidence interval (CI) to assess characteristics associated with receipt of chemical restraint. If an adverse outcome occurred during a visit, we described visit characteristics (eg, length of stay, concomitant physical restraint).

Results: A total of 94,204 ED visits (56,154 patients) met the cohort selection criteria, 11,048 (11.7%) received nonconsensual chemical restraint, and 3,544 (3.8%) experienced an adverse outcome. Median patient age was 34 years (IQR 25 to 48), and 46,948 (49.8%) visits were for male patients. Characteristics associated with a higher adjusted odds of chemical restraint included Black race (aOR 1.38, 95% CI 1.27-1.50) compared to white race and Medicaid/Medicare (aOR 1.38, 95% CI 1.29-1.48) compared to Kaiser Permanente (KP), commercial insurance. Higher adjusted odds of chemical restraint were also associated with concomitant physical restraint (aOR 33.05, 95% CI 30.28-36.08), EMS or law enforcement arrival (aOR 1.51, 95% CI 1.43-1.60) compared to self-arrival, and involuntary mental health hold placement (aOR 1.66, 95% CI 1.56-1.77). Patients' age, sex, and need for interpreter services were not associated with nonconsensual chemical restraint. Of the 3,544 ED visits with an adverse outcome, median length of stay was 16.1 hours (IQR 8.5 to 25.8), 413 (11.7%) involved concomitant physical restraint, and 2,031 (57.3%) had involuntary mental health hold placement.

Conclusions: We observed higher odds of nonconsensual chemical restraint use among patients arriving via EMS or law enforcement, those who had concomitant physical restraint use or involuntary mental health hold placement, as well as Black and Medicaid/Medicare insured patients. Adverse outcomes were infrequent. Further work is needed to understand how factors including comorbid mental health conditions and unmeasured confounders (system, provider, and patient characteristics) may impact the use of nonconsensual chemical restraint.

Figure 1. Flow diagram of total encounters with and without chemical restraints



No, authors do not have interests to disclose

246

Utility of Emergency Department Diagnostic Testing in Medical Clearance of the Psychiatric Patient



Lovett S, Patel P, Lew G, Rech M/Loyola University Medical Center-Trinity Health; Loyola Stritch School of Medicine. Chicago, Illinois, US

Objectives: Mental health complaints comprise 8% of patient visits to the Emergency Department (ED), with visits increasing since the COVID-19 pandemic. Inpatient psychiatric facilities require an assessment of medical stability prior to accepting a psychiatric admission, often creating delays in patient transfer from the ED. This study aimed to evaluate the utility of laboratory and radiologic testing both after clinical evaluation by the ED provider, and as requested by the accepting facility prior to transfer for inpatient psychiatric admission.

Methods: This is a retrospective review of patients who presented to either an urban academic tertiary care center ED or an associated community hospital ED from January 2018 to January 2019 for medical clearance prior to transfer to a primary psychiatric facility. We evaluated standard tests that are required by majority of facilities (e.g complete blood count (CBC), basic metabolic panel (BMP), serum ethanol level (ETOH), urine drug screen, and urine pregnancy in females of childbearing age) as well as additional requests for testing by the receiving facility. The primary outcome was to determine if additional requested labs or radiologic testing by the accepting psych facility resulted in any change in patient disposition. Secondary outcomes include what proportion of our inpatient psychiatric admission transfers have abnormal results, and the clinical relevance and impact of the abnormal results on patient management and ultimate disposition.

Results: Eight hundred twenty-two patient ED encounters with mental health related complaints and possibility of inpatient transfer for psychiatric admission were reviewed. 614 patients (74.7%) had all standard medical clearance labs required by many facilities ordered immediately by the ED provider. Psychiatric facilities requested additional testing in 68 (8.3%) of patients. The most requested additional testing included computed tomography (CT) of the head, EKG, and serum troponin levels. None of requested additional testing changed patient management or final disposition from the ED. In initial work-up based on clinical exam by the ED provider, a CT head was ordered in 87 (10.5%) patients, an EKG in 297 (36.1%) patients, and a troponin in 83 (10%) of patients. 51 patients (6.2%) had some minor change in management due to abnormal laboratory or radiographic findings (potassium repletion, antibiotics initiated, or intravenous fluids given for example). However, disposition decision was changed in only 1 (0.1%) patient that was found to have a subdural hematoma on head CT and was admitted to the intensive care unit.

Conclusions: Medical clearance is a necessary component of evaluation for patients prior to psychiatric admission. While clinical evaluation by an ED provider may trigger warranted laboratory or radiologic testing, requested testing after ED evaluation from the psych facility did not lead to medical admission or changes in management in our study population.

No, authors do not have interests to disclose

247

Acute Healthcare Utilization Among Schizophrenia or Related Conditions and Bipolar Disorder Before and After COVID-19



Vilke G, Santodomingo M, Castillo E/University of California San Diego, San Diego, California. US

Objectives: Mental health resources continue to be a challenge in most communities and emergency departments (EDs) often care for patients with acute mental health issues. The COVID-19 pandemic led to changes in ED utilization patterns in many populations and potentially exacerbated mental health issues. The purpose of this study was to assess trends in ED utilization of patients with schizophrenia or related condition and bipolar disorder over a four-year period in California.

Methods: This was a multicenter retrospective study to identify trends of ED utilization among patients 18 years or older with schizophrenia or related schizo-affective conditions (SCH) and bipolar disorder (BPD) from 2018-2021 using non-public data from the Department of Health Care Access and Information (HCAI) ED and inpatient discharge databases. Data were from all licensed, non-federal, acute care hospitals in California. Patients were identified by primary diagnosis (SCH included ICD-10 codes F20 – F29; BPD included ICD10 codes F31.X). Overall utilization and admission rates are reported per 100,000 ED visits per year and differences and associated 95% confidence intervals are reported.