

Research - R146

Poster

Abstract Title:

The Incidence and Impact of Prescription Controlled Substance use among Injured Patients at a Level One Trauma Center

Authors:

Matthew Bozeman MD, Kimberly Broughton-Miller APRN, Michelle Frisbie APRN, Karina Pentecost APRN, Jodi Wojcik APRN, Robert Cannon MD, Jason Smith MD, Brian Harbrecht MD, Glen Franklin MD, Matthew Bennis MD.

Background & Purpose:

There has been increasing attention focused on the epidemic of prescription drug use in the United States, but little is known about its effects in trauma. The purpose of this study was to define the incidence of prescription controlled substance use among trauma patients and determine its effects on outcome.

Study/Project Design:

A retrospective review of all injured patients admitted from January 1, 2011 to December 31, 2011.

Setting:

Academic Level 1 center

Sample:

2983 patients were admitted during the study time period and 1797 met inclusion criteria.

Procedures:

A retrospective review of all injured patients admitted to a level 1 trauma center from January 1, 2011 to December 31, 2011 was performed. Patients who died within 24 hours of admission or whose outpatient medications were unknown were excluded. Data review included home benzodiazepine or narcotic use, gender, age, mechanism of injury, injury severity scores (ISS), intensive care unit (ICU) and overall length of stay, and overall cost. SAS version 9.3 was used for analysis and $p \leq .05$ was considered statistically significant.

Findings/Results:

2983 patients were admitted during the study time period and 1797 met inclusion criteria. Overall incidence of prescription controlled substance use was 19.7%. Patients using benzodiazepines and/or narcotics were more likely to be women (27.3% vs 16.2%, $p < .001$), older (48.2 years vs 43.7 years, $p < .001$), had a longer mean ICU length of stay (3.6 vs 2.6 days, $p = .042$), and a longer mean hospital length of stay (8.0 vs 6.6, $p = .021$). ISS and mechanism of injury were not different between groups. Overall cost was greater in drug users (151,651 dollars vs 92,665, $p = .173$), but did not reach significance due to wide variability in charges.

Discussion/Conclusions/Implications:

One-fifth of injured patients at our trauma center report the use of prescription controlled substances on admission. Users of these medications are more likely to be women and of older average age. Hospital and ICU length of stays were longer for controlled substance users with no difference in ISS between groups. Outpatient use and abuse of these medications can increase the overall healthcare burden given the large number of patients admitted nationwide following trauma.