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One Last Shot: Self-Inflicted Firearm Violence in Trauma Centers in 2012-2013

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visits statewide, comprising 3.3%, 4.5%, and 6.1% of total ED volume during 2014-2016, respectively. The most common treated condition of FSED visits is “Injury and Poisoning” (~25% of total FSED visits) compared to “Signs, Symptoms, and Ill Defined Conditions,” which is ~22% of total traditional ED visits. Regarding all years examined, FSEDs had lower average costs for each of the ED’s top three treated conditions: “Injury and Poisoning” \$3,679 vs \$4,745; “Signs, Symptoms, and Ill Defined Conditions” \$5,822 vs \$7,888; “Diseases of the Respiratory System” \$2,821 vs \$3,370. The price difference between the top three treated conditions has remained relatively stable in the years examined.

**Conclusion:** The emergence of newly built FSEDs has many implications for how they will impact traditional EDs and care of patients. Considering that the most common condition treated during visits to FSEDs in Florida is “Injury and Poisoning,” such facilities should be equipped and staffed accordingly to handle this condition. The cost of FSED visits are consistently lower than traditional ED visits throughout the years examined; this is different from FSED visits in Texas where their costs have become comparable to traditional EDs. Continued monitoring of FSEDs is warranted particularly with factors affecting costs and its ability to affect traditional EDs’ volume.

## 6 One Last Shot: Self-Inflicted Firearm Violence in Trauma Centers in 2012-2013

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**Objectives:** Intentional self-harm (suicide) is a growing problem in the United States and is one of the top ten leading causes of death. Our objective is to compare the presentations and outcomes of victims of self-inflicted gunshot wounds (SIGSW) by handguns versus other types of firearms. Additionally, we compare the presentations and outcomes of victims with head/face injuries to other regions of the body.

**Methods:** We performed a retrospective analysis of data from the National Trauma Database of all patients who presented to registered trauma centers between 2012 and 2013. Categorical data included patient characteristics upon presentation and outcomes which were compared between patient’s with handgun injury versus shotgun, hunting rifle, and military firearms using the Chi-Squared test. Continuous data were analyzed through the Mann-Whitney U test. Additionally analysis of head and face injuries versus other bodily injuries were compared between the handgun group versus shotgun, hunting rifle, and military firearms group using Chi-squared test.

**Results:** There were a total of 7828 SIGSWs from the NTDB data. Males accounted for 6600 (84.3%) patients and females accounted for 1228 (15.7%) patients. Of the total number of SIGSWs, 78% (6115) were white. Handguns accounted for 5139 patients and 1130 were due to shotguns, hunting rifles, and military firearms. There were 1405 SIGSWs due to all other types of guns not identified.

Patient’s in the handgun group were statistically more likely to be older than 55 years, be hypotensive (systolic blood pressure < 90) upon arrival in the emergency department, have a lower GCS score, test positive for illegal drugs, use prescription drugs, sustain GSW to head, be admitted to the ICU, have a shorter length of stay, and expire in the emergency department.

When comparing those who had head and facial injuries (4799) to those who had injuries to other bodily regions (3028), those who sustained head and facial injuries were statistically more likely to be male, use handguns, be hypotensive, have a lower GCS score, test positive for alcohol but be less likely to test positive for illegal and prescription drugs, be admitted to the ICU, expire in the emergency department, and have an higher overall mortality.

**Conclusions:** In this retrospective cohort study, we were able to demonstrate several differences between patients with handguns that are involved in SIGSW versus those that use other types of firearms. It is hoped that this information could be used to better understand those who are particularly vulnerable to SIGSW. Future studies can use this information to develop educational and prevention programs.